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U. S. DEPARTMENT OF AGRICULTURE.

WEATHER BUREAU.

T H E

CLIMATE OF SAN FRANCISCO, CALIFORNIA.

Prepared under direction of
WILLIS L. MOORE,
Chief United States Weather Bureau,

BY

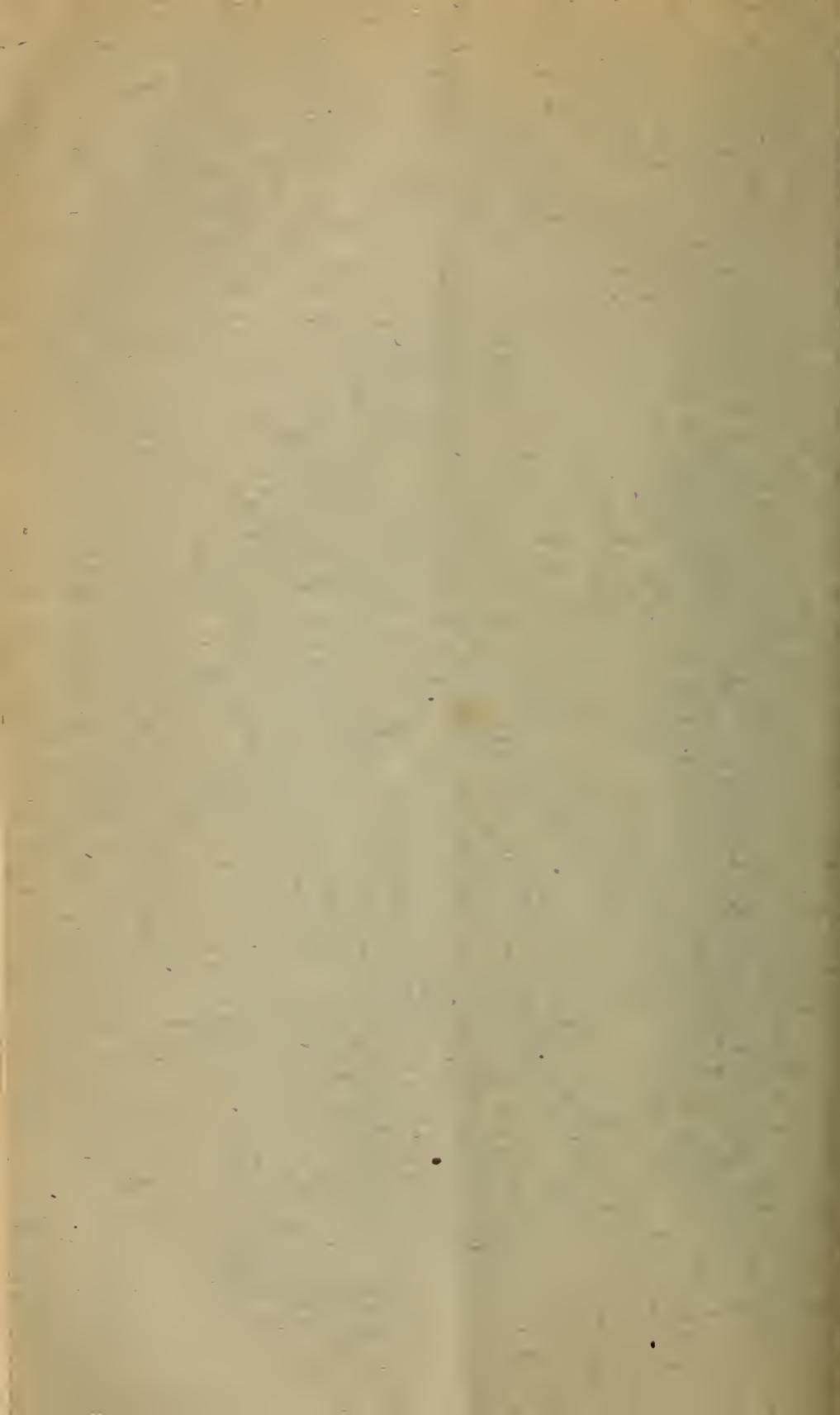
ALEXANDER G. M'ADIE and GEORGE H. WILLSON.



WASHINGTON:

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LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF AGRICULTURE,
WEATHER BUREAU,
Washington, D. C., November 11, 1899.

Hon. JAMES WILSON,
Secretary of Agriculture.

SIR: I have the honor to submit herewith the manuscript of a paper entitled, "The Climate of San Francisco, Cal." by Alexander G. McAdie, forecast official, and George H. Willson, local forecast official, and to recommend its publication as a bulletin of the Weather Bureau.

The climatic characteristics of the Pacific coast and the peculiar local environment of San Francisco combine to make a report of this character both interesting and instructive. The authors have presented the climatological data accumulated at the San Francisco station during the last thirty years in considerable detail, yet not more so than is warranted by the lack of such information and the relative importance of San Francisco as an objective point for many of our citizens who visit the Pacific coast.

Very respectfully,

WILLIS L. MOORE,
Chief United States Weather Bureau.

Approved:

JAMES WILSON, *Secretary.*

THE CLIMATE OF SAN FRANCISCO.

The city of San Francisco is justly famed for its peculiar climate. To a large degree the topography of a section controls its climate, and it is not surprising, therefore, to find that in the vicinity of San Francisco the topography is exceedingly diversified.

From the Weather Bureau station on Mount Tamalpais—elevation of station, 2,373 feet¹—one looks down to the west on the broad expanse of the Pacific. From the open roadstead of Drakes Bay the eye passes over the Sausalito Hills to the headlands at Points Bonita and Lobos, marking the entrance to the Golden Gate. This passage plays an important rôle in connection with the winds, temperature, and fogs of the San Francisco Bay region. At mean tide the area of San Francisco Bay is about 450 square miles.

Far on the eastern horizon, especially on clear winter days, the snows of the Sierras, 155 miles distant, can be seen glistening. These mountains vary in height from 8,000 to 14,000 feet.

Extending from the slopes of the Sierras to the Coast Range is a great basin, 500 miles long and about 50 wide. The Sacramento and the San Joaquin rivers flowing through this basin unite in Suisun Bay. This great inland basin, surrounded by mountain walls, is connected with the Pacific Ocean by the Gate at San Francisco, San Francisco Bay, San Pablo Bay, Carquinez Straits, and Suisun Bay.

If a native of San Francisco were asked which was the coldest month of the year, he might be unable to answer, and if asked which was the warmest he might say November. This confusion arises from the comparatively small range of temperature. The mean annual temperature, as determined from the records of the Weather Bureau for 28 years, is 56.2°. May and November have practically the same temperature. The warmest month is September, 60.9°; the coldest January, 50.1°; the other months have mean temperatures as follows: February, 52°; March, 54°; April, 55°; May, 57°; June, 59°; August, 59°; October, 60°; November, 56°; December, 52°.

The highest temperature ever recorded in San Francisco was 100° on June 29, 1891, and the lowest 29° on January 15, 1888. Abnormally warm and cold periods last, as a rule, about three days. The mean of the three consecutive warmest days at San Francisco has never exceeded

¹ West Peak, 2,604; Middle Peak, 2,520; East Peak, 2,592; latitude, 37° 56' N.; longitude, 122° 36' W.

76.3°. A period of warm weather during the summer months is, as a rule, brought to a close about the evening of the third day with strong west winds, dense fog, and temperatures ranging from 49° to 54°. The mean of the three consecutive coldest days was 40.7°. The greatest daily range of temperature was 43° on June 29, 1891. This was the date when the temperature reached 100°. The range of temperature was from 100° to 57°. The morning was calm and very warm while at 5 p. m. the temperature was 80° and next morning 74°.

Since the establishment of the Weather Bureau on Mount Tamalpais it has been evident that the conditions at San Francisco are those of sea level, while very different and more normal conditions prevail at elevations of several thousand feet. Thus, the mean monthly temperatures of San Francisco and Mount Tamalpais show that the seasonal changes are masked at the lower station while plainly marked at the upper:

1898.

	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Mean.
Mount Tamalpais.	40.8	46.4	46.6	56.0	50.5	61.9	70.0	67.5	62.6	59.4	51.2	45.7	54.9
San Francisco.....	46.7	52.6	51.2	54.5	52.6	59.0	56.0	58.0	59.0	61.2	55.4	49.7	54.7

The difference in temperature on summer days is often very great. During the month of June, 1899, an attempt was made to use this vertical thermal gradient in practical forecasting. It would perhaps be more accurate to describe this difference as a thermal decrement, since it is largely a cooling due to the proximity of the Pacific with its 16,000,000 square miles of water, the mean temperature of the ocean water along the northern coast of California averaging 55°.

Including every day in the month of June there was found to be a mean daily difference of 11.4°, or, in other words, from the data obtained by means of this mountain station, checked by data from Point Reyes and Mount Hamilton, the temperature rose at the rate of 1° for every 203 feet of elevation. This increase held at least up to 2,380 feet.

If we consider only those days in the month (24) when there was a rise with elevation, we have for the mean daily difference in temperature between Mount Tamalpais and San Francisco 15.3°; i. e., the temperature rises 1° for every 155 feet elevation. This may be adopted as a working normal summer-day gradient.

For days when there was a decrease in temperature with elevation, 6 in all, we find a difference of 5.9°, or there was 1° fall for every 402 feet, which it may be noted is not quite as steep a gradient as values generally given in text-books—1° for every 300 feet.

We notice first that periods of rainy or cloudy and cold weather occur when the surface temperatures are higher than those of the upper level. It would seem as if at these times the different air strata from sea level to 2,500 feet had been intermingled to some degree, and

the cold layer usually existing close to the surface had been temporarily displaced.

Fogs seem to occur at times of steep inverted gradients; in other words, when the temperature of the 2,500-foot level is considerably higher than at sea level.

The summer fogs of San Francisco result from a chilling of the upper warm air, descending to the ocean surface, and particularly over the cold current close to the shore. There is a great difference of temperature between the valley and the ocean, often 50° within as many miles, and this is probably the prime factor in establishing a marked air movement, shown by the strong indraft through the Gate on summer afternoons (see charts of hourly wind velocity, 3 to 7 p. m.).

An interesting instance of the effect of fog in lowering the temperature occurred on July 25, 1899. At Mount Tamalpais at about 4 a. m. the temperature was 64°; at 5 a. m. the fog rose until it reached a height of 2,200 feet and the temperature fell to 47°. The temperature at San Francisco at the same hour was 54°.

Passing from the fogs of the summer months, the seasonal character of the rainfall demands attention. Referring to the tables and charts accompanying, it will be seen that July and August are practically without rain, while December and January together have nearly 10 inches. The annual rainfall is 23 inches.

By comparing the seasonal rainfall with the crop yield it would appear that in years when the rain falls generously in March and April the yield is largest, other things being equal. In other words, it is the time distribution of the rain, more than the intensity or total rainfall, which benefits vegetation.

The Weather Bureau (Signal Service) office was originally located in the Merchants' Exchange Building, and the first observation taken February 2, 1871. The office was moved to the Phelan Building September 4, 1890. On November 1, 1892, it was moved to its present quarters in the Mills Building.

The present elevations of instruments above the ground are, thermometers 161 feet, rain gauge 154 feet.

Monthly mean temperatures.

	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1871	51.3	53.3	54.3	56.9	56.6	57.9	60.4	61.8	55.1	52.9	56.0	56.0	56.0
1872	54.2	54.3	53.4	56.0	57.9	59.8	62.4	63.3	58.8	55.0	52.1	56.2	56.2
1873	54.8	50.9	54.5	54.6	55.4	57.1	58.1	59.5	58.3	59.7	57.7	55.9	55.9
1874	49.3	51.2	50.9	54.9	57.6	59.1	57.8	59.0	61.4	59.8	56.1	50.3	55.6
1875	52.0	51.8	55.4	55.4	57.9	59.4	58.8	58.8	62.0	62.0	51.4	56.0	56.0
1876	48.8	52.8	53.2	55.4	56.8	61.4	59.6	61.5	59.9	58.0	53.0	56.6	56.6
1877	55.8	57.2	54.4	56.2	62.0	60.8	59.8	62.5	59.2	57.2	57.7	57.7	57.7
1878	52.8	53.3	55.9	56.0	58.0	58.8	58.6	59.1	60.2	61.6	51.6	56.9	56.9
1879	54.6	57.2	50.5	56.4	60.2	60.2	58.7	66.5	61.0	61.0	55.0	56.7	56.7
1880	48.8	49.4	63.3	57.7	57.2	58.8	57.6	58.8	59.1	58.9	54.2	54.9	54.9
1881	54.0	55.3	54.4	57.9	58.0	58.6	59.7	58.8	59.7	56.6	55.1	56.6	56.6
1882	49.4	53.4	53.0	57.0	57.9	59.5	58.6	59.8	59.8	58.8	52.8	55.2	55.2
1883	47.0	48.8	54.0	52.2	51.4	59.4	60.2	61.4	60.0	63.1	57.9	54.1	56.6
1884	50.6	50.8	54.5	56.0	59.4	60.2	61.4	60.0	63.6	58.2	57.4	52.8	56.7
1885	55.3	57.7	58.2	58.1	57.8	61.6	59.6	61.6	60.7	57.8	54.6	57.8	57.8
1886	51.1	56.8	53.6	55.4	59.1	60.3	60.6	60.6	62.4	58.6	56.8	53.6	57.3
1887	52.6	47.8	55.8	55.8	57.0	59.4	56.6	57.8	62.0	64.2	56.4	52.2	56.5
1888	46.7	53.9	53.4	57.8	61.4	62.4	61.4	60.8	62.6	61.6	57.0	53.2	57.3
1889	50.4	54.0	57.2	58.8	60.2	58.8	60.4	64.6	61.8	61.8	51.3	57.9	57.9
1890	46.2	51.1	53.8	54.8	59.2	59.8	61.4	60.4	62.4	59.0	49.8	56.3	56.3
1891	52.2	55.0	53.4	55.7	60.2	59.0	59.7	61.8	61.8	58.6	49.6	56.6	56.6
1892	51.7	52.4	53.1	58.0	56.8	58.1	59.4	60.2	60.2	59.6	51.1	56.0	56.0
1893	47.4	50.3	51.2	52.4	55.8	56.5	56.6	56.6	59.3	57.6	52.4	54.3	54.3
1894	47.7	48.4	50.6	55.2	55.4	55.9	56.4	59.2	63.4	59.6	59.4	49.7	55.1
1895	48.6	53.8	52.2	54.8	57.6	58.7	58.4	58.4	60.7	58.8	56.2	48.6	55.6
1896	52.2	55.3	54.3	51.6	56.3	57.2	59.4	59.5	59.0	58.8	52.8	55.9	55.9
1897	48.6	50.7	48.9	57.4	58.9	58.2	57.4	60.8	58.4	53.1	50.7	55.0	55.0
1898	46.7	52.6	51.2	54.4	52.6	59.0	56.2	57.0	59.0	61.2	55.4	54.0	54.0
Summ.	1352.3	1408.8	1501.1	1540.4	1566.5	1651.6	1646.8	1650.6	1703.5	1678.1	1577.8	1444.0	1572.8
Means.	50.1	52.2	53.6	55.0	57.0	59.0	58.8	59.3	60.0	59.3	56.4	51.6	56.2

SUMMARY OF MONTHLY MEAN TEMPERATURES.

Highest monthly mean	.....	(date)	1873	1886	1885	1889	1885	1891	1889	1887	1804	1885	1880
Lowest monthly mean	.....	(date)	1890	1887	56.8	57.7	62.4	61.6	61.8	64.6	59.4	54.0	57.0
Absolute maximum...	.....	(date)	26, 1899	18, 1899	47.8	48.9	51.6	52.6	55.9	56.2	58.3	48.6	48.3
	78	80	80	80	80	80	80	80	92	92	94	83	100

Absolute minimum	15,1888	5,1887	3,1896	7,1891	16,1894	19,1893	31,1893	8,1893	30,1894	14,1881	27,1890	24,1879	21888
20	33	40	44	47	47	47	45	49	45	45	38	34	29
24	27	28	34	39	43	36	38	35	31	25	20	15	43
9.9	10.7	11.3	11.7	12.0	12.5	11.5	11.4	13.3	13.3	11.3	9.3	11.5	11.5
2.0	2.5	2.5	2.7	2.9	2.4	2.4	2.4	2.4	3.0	3.5	2.6	2.2	2.6
2.2	2.2	2.5	2.7	2.9	2.4	2.4	2.4	2.4	3.0	3.5	2.6	2.2	2.6
Mean of three consecutive warmest days ³	64.7	67.7	66.7	73.7	76.0	66.3	76.0	76.3	71.7	69.3	62.0	76.3	76.3
Mean of three consecutive coldest days ³	43.7	40.7	48.3	49.7	53.0	50.0	52.7	54.0	52.0	44.7	42.3	40.7	40.7

WEATHER.

Average number clear days	11	10	11	12	13	14	11	10	14	16	15	12	149
Average number partly cloudy days	10	10	11	12	11	11	14	15	12	11	9	10	137
Average number cloudy days	10	8	9	6	5	6	6	6	4	4	6	9	79
Average number rainy days	11	10	10	7	4	2	1	1	40	2	4	7	69

¹June 29.²January 15.³Record subsequent to January 1, 1891.⁴Only 10 days in 27 years.

Monthly precipitation (in inches and hundredths).

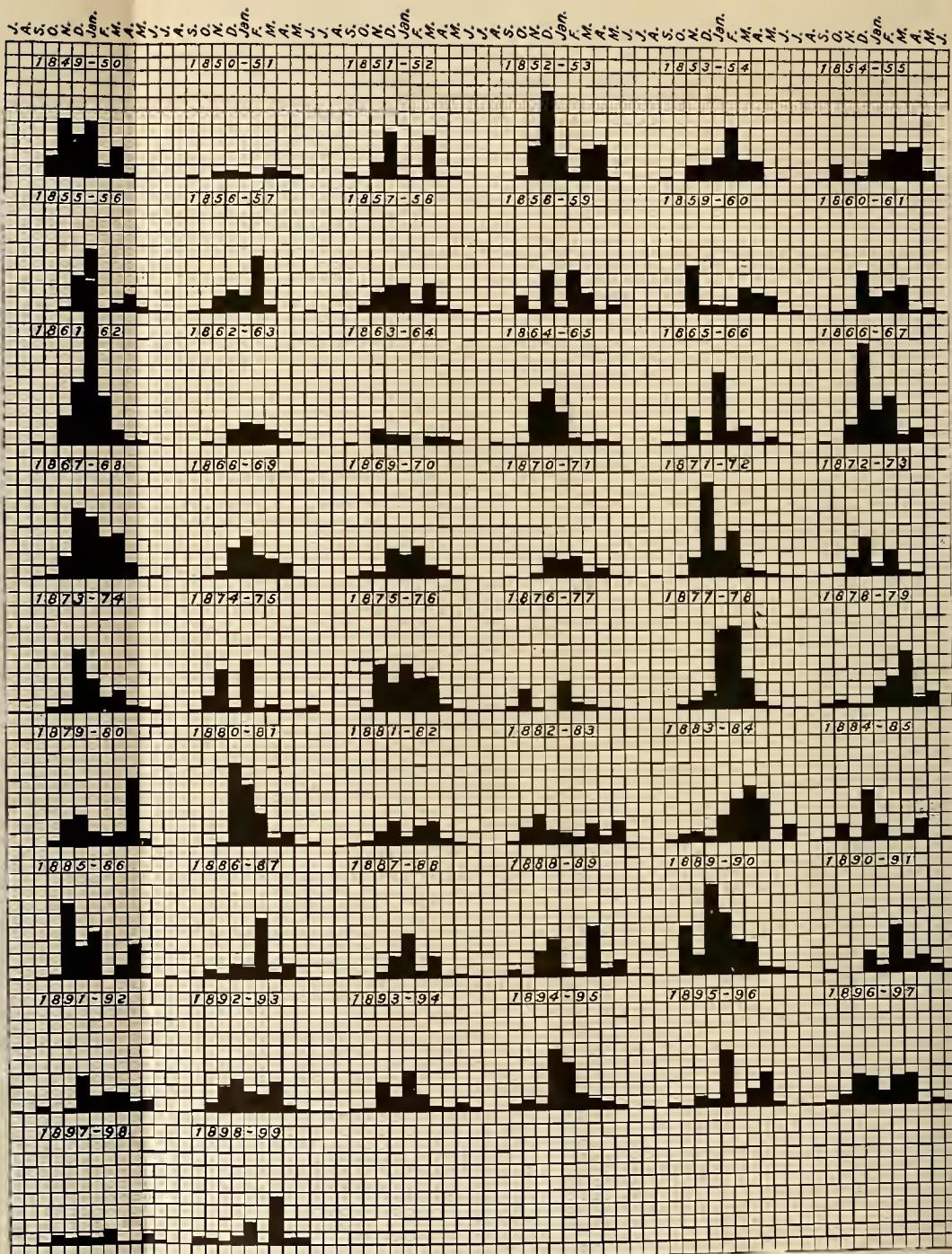
Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.	Season of—	Seasonal.	
1840	8.34	1.77	4.53	0.46	0.00	0.00	0.00	0.00	0.00	3.14	8.06	6.20	17.40	1849-50	33.10	
1850	0.72	0.54	1.04	1.23	0.67	0.00	0.00	0.00	0.00	0.92	1.05	15.56	1850-51	7.40		
1851	0.58	0.14	1.68	0.26	0.32	0.00	0.00	0.00	0.00	2.12	7.10	15.56	1851-52	18.44		
1852	3.92	1.42	4.86	0.86	0.35	0.00	0.00	0.00	0.00	5.31	13.20	27.29	1852-53	35.23		
1853	3.51	3.12	0.02	0.08	0.00	0.04	0.46	0.12	2.28	2.28	2.22	21.14	1853-54	23.37		
1854	8.04	3.51	3.12	0.02	0.08	0.00	0.01	0.15	2.41	0.34	0.81	1854-55	23.68			
1855	3.67	4.77	4.64	5.00	1.88	0.00	0.00	0.00	0.00	0.67	5.76	26.39	1855-56	21.66		
1856	9.40	5.50	1.60	2.94	0.67	0.63	0.02	0.00	0.07	2.79	3.75	22.31	1856-57	19.88		
1857	2.45	8.50	1.62	0.00	0.02	0.12	0.05	0.00	0.00	3.01	4.14	20.03	1857-58	21.81		
1858	4.36	1.83	5.65	5.55	0.34	0.05	0.16	0.00	0.00	2.74	0.69	23.46	1858-59	22.22		
1859	1.28	6.32	3.02	0.27	1.55	0.00	0.00	0.02	0.03	7.28	1.57	21.39	1859-60	22.27		
1860	1.64	1.60	3.99	3.14	2.86	0.09	0.21	0.00	0.00	0.58	6.16	20.46	1860-01	19.00		
1861	2.47	3.72	4.68	0.51	1.00	0.08	0.00	0.00	0.00	4.10	9.54	25.52	1861-02	49.27		
1862	24.36	7.53	2.20	0.73	0.74	0.05	0.00	0.00	0.00	0.40	0.15	2.35	1862-63	13.08		
1863	3.19	2.06	1.04	0.26	0.00	0.00	0.00	0.00	0.03	0.00	2.55	1.80	1863-64	10.08		
1864	1.83	0.00	1.32	1.57	0.78	0.00	0.00	0.21	0.01	0.13	0.68	8.91	12.64	1864-65	24.73	
1865	5.14	1.34	0.74	0.94	0.63	0.00	0.00	0.24	0.26	4.19	0.58	14.00	1865-66	22.93		
1866	10.88	2.12	3.04	0.04	1.46	0.04	0.00	0.00	0.11	0.00	3.35	15.10	36.28	1866-67	34.92	
1867	5.16	7.20	1.53	2.36	0.12	0.00	0.00	0.00	0.04	0.20	3.41	10.69	30.64	1867-68	38.84	
1868	9.50	6.13	6.36	2.31	0.03	0.23	0.00	0.00	0.00	0.15	1.18	4.34	30.17	1868-69	21.35	
1869	6.35	3.90	3.14	2.19	0.08	0.02	0.00	0.00	0.12	1.29	1.19	4.31	1869-70	19.31		
1870	3.80	4.78	2.00	1.53	0.20	0.00	0.00	0.00	0.03	0.00	0.43	3.38	16.24	1870-71	14.10	
1871	3.07	1.01	0.76	1.11	1.80	0.23	0.01	0.00	0.02	0.07	2.81	14.36	22.42	1871-72	34.71	
1872	4.00	6.90	1.59	0.81	0.18	0.04	0.01	0.00	0.04	0.11	2.79	5.95	24.46	1872-73	18.02	
1873	1.58	3.94	0.70	0.43	0.00	0.02	0.01	0.08	0.00	0.83	1.16	9.72	18.56	1873-74	23.98	
1874	5.66	2.21	3.26	0.90	0.66	0.14	0.00	0.00	0.02	2.69	6.55	0.33	22.52	1874-75	18.40	
1875	8.01	0.32	1.30	0.10	0.22	0.02	0.00	0.00	0.00	0.24	7.27	4.15	22.63	1875-76	26.01	
1876	7.55	4.92	5.40	2.20	0.24	0.04	0.01	0.01	0.02	3.36	0.60	1.57	11.93	1876-77	11.04	
1877	4.32	1.18	1.08	0.26	0.18	0.01	0.00	0.00	0.00	0.00	0.57	0.58	33.20	1877-78	35.18	
1878	11.97	12.52	4.56	1.06	0.16	0.01	0.01	0.02	0.55	1.27	0.78	4.03	30.76	1878-79	24.44	
1879	3.52	4.90	8.75	1.69	0.02	0.05	0.05	0.00	0.00	0.00	0.33	12.33	30.07	1879-80	26.66	
1880	2.23	1.87	2.08	10.06	1.12	0.00	0.00	0.00	0.00	0.05	1.94	3.25	23.73	1880-81	29.86	
1881	8.69	4.65	0.00	2.00	0.22	0.69	0.00	0.00	0.25	0.54	4.18	18.67	1881-82	16.14		
1882	1.68	2.96	3.45	1.22	0.21	0.00	0.00	0.26	0.66	0.42	1.48	1.60	0.92	1882-83	20.12	
1883	1.92	1.04	3.01	1.51	3.52	0.01	0.00	0.00	0.42	0.33	0.25	7.03	1883-84	32.38		
1884	3.04	6.15	8.24	6.33	0.23	2.57	Trace.	0.04	0.00	0.00	0.00	24.90	1884-85	18.10		
1885	2.53	0.30	1.01	3.17	0.04	0.19	0.06	Trace.	0.11	0.72	11.78	4.09	1885-86	33.05		
1886	2.24	2.07	5.28	0.37	0.01	0.23	Trace.	0.01	0.00	0.00	0.84	2.07	20.02	1886-87	10.04	
1887	1.90	0.24	0.04	0.00	0.00	0.07	Trace.	0.01	0.29	Trace.	0.99	3.34	19.04	1887-88	16.74	
1888	6.81	0.94	3.00	0.11	0.38	0.27	0.01	0.01	0.08	0.13	3.09	5.80	23.63	1888-89	16.74	
1889	1.28	0.72	7.78	0.96	2.17	0.03	0.01	0.02	0.00	7.28	2.90	13.81	25.43	1889-90	45.85	
1890	0.61	5.16	4.73	1.18	0.10	0.00	0.00	0.31	0.00	0.00	0.00	0.00	21.11	1890-91	5.62	
1891	0.98	7.26	1.00	2.44	1.25	0.11	0.10	0.02	0.77	0.04	0.50	0.50	0.50	21.11	1890-91	17.58

1892	2.42	2.90	2.85	1.39	1.86	Trace.	0.00	0.00	0.02	1.65	3.91	5.08	22.08	18.53
1893	3.05	2.75	4.08	1.63	0.15	0.03	0.21	0.02	0.00	2.25	17.01	18.92-93	22.05	
1894	5.09	2.69	0.60	0.50	1.31	0.56	Trace.	0.00	1.05	1.73	0.88	9.01	24.32	18.47
1895	6.99	2.31	1.89	1.24	0.60	0.00	0.01	0.00	0.77	0.11	1.78	1.43	17.13	18.4-95
1896	8.14	0.28	2.85	5.16	0.72	0.60	0.04	0.09	0.52	1.55	4.56	4.34	28.25	18.95-96
1897	2.26	4.41	4.56	0.27	0.61	0.22	Trace.	0.10	1.70	1.05	1.22	16.49	18.96-97	23.43
1898	1.12	2.13	0.24	0.19	1.44	0.19	0.00	0.00	0.06	0.86	0.46	1.62	9.31	18.97-98
1899	3.67	0.10	7.61	0.62	0.86	0.01	0.00	0.00	0.00	3.92	3.79	2.65	23.23	18.98-99
	245.70	174.68	160.92	92.23	36.36	7.23	0.89	0.79	11.12	52.98	138.86	234.74	1150.79	
Sum ^a	4.92	3.49	3.22	1.84	0.73	0.14	0.62	0.62	0.22	1.92	2.72	4.99	23.02	
Means														

^aBeginning of Weather Bureau record.

Greatis precipitation in twenty-four hours for each month.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Greatest annual.
1871	2.36	1.28	0.57	1.28	0.13	0.01	0.00	0.02	0.00	0.07	1.24	3.14	
1872	1.02	0.82	0.73	0.35	0.15	0.03	0.01	0.00	0.04	0.11	2.06	2.33	
1873	1.61	0.81	0.54	0.30	0.00	0.01	0.01	0.05	0.00	0.77	0.80	2.33	
1874	2.10	0.27	0.61	0.05	0.22	0.13	0.00	0.00	0.02	1.58	3.98	3.98	
1875	0.27	0.45	0.45	0.06	0.14	0.00	0.00	0.00	0.00	0.22	2.37	2.37	
1876	1.76	1.80	1.59	0.60	0.24	0.04	0.01	0.01	0.20	1.39	0.10	1.80	
1877	1.63	0.52	0.50	0.08	0.18	0.01	0.02	0.00	0.00	0.36	0.56	1.11	
1878	1.08	1.92	1.01	0.61	0.14	0.01	0.01	0.00	0.00	1.27	0.45	1.63	
1879	1.04	1.66	3.31	0.57	0.72	0.93	0.05	0.01	0.02	0.56	1.38	1.55	
1880	1.63	0.64	0.64	2.21	0.84	0.00	0.00	0.00	0.00	0.65	0.32	2.36	
1881	4.67	1.37	0.69	1.69	0.17	0.41	0.00	0.00	0.00	0.21	1.34	1.35	
1882	0.57	0.86	0.82	0.44	0.15	0.02	0.00	0.00	0.00	0.26	1.40	0.76	
1883	1.30	0.71	1.03	0.76	1.23	0.01	0.00	0.00	0.00	1.19	1.01	0.28	
1884	1.44	1.52	2.21	1.66	0.12	1.23	0.00	0.03	0.21	1.15	2.07	2.21	
1885	0.97	0.15	0.55	2.63	0.04	0.10	0.05	0.00	0.00	0.70	2.58	2.78	
1886	2.40	0.18	0.65	1.36	0.21	0.01	0.23	0.00	0.01	0.72	0.77	2.40	
1887	0.80	3.60	0.52	1.45	0.03	0.07	0.00	0.00	0.00	0.18	0.48	1.14	
1888	1.58	0.38	1.34	0.11	0.10	0.10	0.00	0.00	0.01	0.92	0.65	3.60	
1889	0.81	0.59	3.68	0.30	1.29	0.63	0.01	0.00	0.00	2.63	0.02	1.68	
1890	2.08	1.63	1.86	0.55	0.53	0.05	0.02	0.00	0.00	0.31	0.00	2.08	
1891	0.75	3.38	0.68	1.20	0.61	0.10	0.05	0.02	0.03	0.63	0.03	3.38	
1892	1.06	1.03	0.00	0.38	1.15	Trace.	0.00	0.00	0.02	0.91	1.46	2.34	
1893	1.30	1.06	0.08	0.71	0.14	0.03	0.02	0.00	0.00	0.12	0.10	1.69	
1894	2.61	1.05	0.34	0.30	0.68	0.22	0.00	0.00	1.04	0.04	0.88	2.01	
1895	1.90	1.44	0.67	0.89	0.27	0.00	0.00	0.00	0.00	0.66	1.06	1.96	
1896	1.85	0.18	0.84	2.43	6.34	0.00	0.04	0.06	0.41	1.40	2.79	2.70	
1897	1.08	1.23	1.42	0.20	0.61	0.19	0.00	0.00	0.00	1.41	0.42	1.42	
1898	0.33	0.78	0.13	0.19	1.23	0.18	0.00	0.00	0.00	0.73	0.36	1.23	
1899	0.98	0.08	2.15	0.45	0.77	0.01	0.00	0.00	0.00	1.04	1.51	1.17	
1900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.15	
Greatest { date													
29, 1881	4.67	3.60	3.31	2.43	1.29	1.23	0.23	0.06	1.04	2.03	3.08	3.14	
4-5, 1887	4.5	1879	23-24, 1896	4-5, 1889	11-12, 1884	10, 1886	29-30, 1886	10, 1886	29-30, 1886	17-18, 1889	23, 1874	18-19, 1871



Dates when precipitation equaled or exceeded 2.50 inches in any consecutive twenty-four hours at San Francisco, Cal.

	Inches.
December 17 and 18, 1871, from 11.43 p. m. 17th to 11.43 p. m. 18th	2.83
December 18 and 19, 1871, from 11.43 p. m. 18th to 11.43 p. m. 19th	3.12
November 22 and 23, 1874, from 11.08 p. m. 22d to ¹ 11.08 p. m. 23d	3.98
March 4 and 5, 1879, from 4.43 p. m. 4th to 4.43 p. m. 5th	3.31
January 28 and 29, 1881, from 11.08 p. m. 28th to 11.08 p. m. 29th	4.67
November 23 and 24, 1885, from 11 p. m. 23d to 11 p. m. 24th	2.58
December 21, 1885, from 1.35 a. m. 21st to 1.35 p. m. 21st	2.78
February 4 and 5, 1887, from 3 p. m. 4th to 3 p. m. 5th	3.60
March 12 and 13, 1889, from 8.15 a. m. 12th to 8 a. m. 13th	3.08
February 14 and 15, 1891, from 8.45 p. m. 14th to 8 p. m. 15th	3.38
January 19 and 20, 1894, from 8 p. m. 19th to 8 p. m. 20th	2.61
November 23 and 24, 1896, 6 a. m. 23d to 6 a. m. 24th	2.79

Maximum rate of rainfall (record since 1893): Five minutes, 0.15; 10 minutes, 0.17; 1 hour, 0.55.

Greatest monthly precipitation and date.

Month.	Year.	Amount.	Month.	Year.	Amount.
January	1862	24.36	July	1886	0.23
February	1878	12.52	August	1864	0.21
March	1879	8.75	September	1898	1.06
April	1880	10.06	October	1889	7.28
May	1883	3.52	November	1885	11.78
June	1884	2.57	December	1866	15.16

Least monthly precipitation and date.

Month.	Year.	Amount.	Month.	Year.	Amount.
January	1852	0.58	July	(¹)	0
February	1864	0	August	(¹)	0
March	1898	0.24	September	(¹)	0
April	1857	0	October	(¹)	0
May	(¹)	0	November	1890	0
June	(¹)	0	December	1876	0

¹ Many years.

Number of times monthly precipitation has exceeded the normal for fifty years.

Month.	Total.	First 25 years.	Second 25 years.	Month.	Total.	First 25 years.	Second 25 years.
January	19	9	10	July	6	2	4
February	22	13	9	August	7	5	2
March	20	10	10	September	18	4	14
April	18	9	9	October	16	5	11
May	18	8	10	November	23	15	8
June	9	1	8	December	20	13	7

Total number of days on which precipitation has fallen since March 1, 1871.

Month.	Less than 0.01.	0.01-0.10.	0.11-0.25.	0.26-0.50.	0.51-1.00.	Over 1.00.
January.....	35	109	61	56	54	34
February.....	21	114	56	51	45	18
March.....	45	129	63	50	45	17
April.....	44	96	40	32	16	16
May.....	49	73	23	10	12	3
June.....	28	43	6	5	3	0
July.....	13	16	1	0	0	0
August.....	18	13	0	0	0	0
September.....	24	31	11	6	5	0
October.....	24	54	17	15	17	10
November.....	26	72	39	32	19	23
December.....	27	89	55	72	46	38

Foggy days and thunderstorms.

Month.	Total number of foggy days.	Number of thunderstorms.	Month.	Total number of foggy days.	Number of thunderstorms.
January.....	13	2	July.....	18	1
February.....	10	0	August.....	26	1
March.....	10	1	September.....	20	2
April.....	6	2	October.....	27	1
May.....	1	1	November.....	22	0
Juno.....	7	1	December.....	15	4

Record began January 1, 1891.

Number of high winds.

Month.	Velocity.			Month.	Velocity.		
	30 to 35.	36 to 40.	Over 40.		30 to 35.	36 to 40.	Over 40.
January.....	18	16	7	July.....	155	42	1
February.....	20	7	1	August.....	133	26	2
March.....	37	11	2	September.....	86	4	0
April.....	67	12	2	October.....	34	3	0
May.....	92	11	2	November.....	10	1	5
June.....	166	28	3	December.....	23	0	3

Record commencing September 1, 1881.

Highest wind velocity, direction, and date for each month.

Month.	Velocity.	Direction.	Date.	Month.	Velocity.	Direction.	Date.
January.....	48	SW.	26, 1875	July.....	41	W.	15, 1898
February.....	48	SW.	¹ 22, 1891	August.....	42	SW.	2, 1893
March.....	44	N.	8, 1880	September.....	38	SW.	11, 1894
April.....	47	N.W.	23, 1871	October.....	38	N.	29, 1877
May.....	45	W.	11, 1897	November.....	56	SE.	30, 1892
June.....	48	SW.	30, 1873	December.....	60	SE.	23, 1892

¹Cups blow off before maximum was reached.

Average velocity of afternoon winds.

Month.	2 to 3.	3 to 4.	4 to 5.	Month.	2 to 3.	3 to 4.	4 to 5.
January.....	8.8	8.6	8.0	July.....	21.0	21.6	22.0
February.....	10.5	10.8	10.8	August.....	20.2	20.9	20.8
March.....	13.4	14.1	14.1	September.....	17.7	18.5	18.4
April.....	16.7	17.3	16.9	October.....	13.4	14.0	14.1
May.....	18.0	18.5	18.1	November.....	9.2	9.4	9.6
June.....	20.8	21.3	21.0	December.....	8.4	8.1	7.7

Average hourly velocity.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1 a.m.	0.1	0.1	6.7	7.3	7.9	9.3	9.2	8.9	6.8	5.3	5.2	6.1
2 a.m.	6.2	5.9	6.3	7.0	7.6	8.8	8.8	8.5	6.4	5.0	5.1	6.2
3 a.m.	6.3	5.8	6.3	6.6	7.2	8.2	8.2	7.9	6.0	4.9	5.2	6.2
4 a.m.	6.3	5.9	6.2	0.3	6.8	7.6	7.8	7.0	5.9	4.8	5.1	6.3
5 a.m.	6.4	6.1	6.3	6.1	6.6	7.1	7.4	7.3	5.6	4.8	5.2	6.4
6 a.m.	6.5	5.9	6.1	6.0	6.4	0.9	7.4	6.9	5.4	4.7	5.3	6.5
7 a.m.	6.4	5.8	6.1	6.2	6.7	7.1	7.4	6.8	5.4	4.7	5.1	6.6
8 a.m.	6.5	6.2	6.6	7.0	7.5	8.1	8.0	7.4	5.8	5.0	5.5	6.8
9 a.m.	7.0	6.9	7.3	7.8	8.3	8.8	8.6	7.8	6.4	5.6	6.1	7.1
10 a.m.	7.6	7.6	8.0	8.6	9.3	10.3	9.9	8.9	7.0	6.2	6.6	7.7
11 a.m.	7.9	7.6	8.4	9.7	11.0	12.4	11.8	11.1	8.3	6.7	6.7	7.8
12 noon	8.2	7.8	9.2	11.6	13.3	15.2	14.7	13.3	10.7	8.1	6.8	7.9
1 p.m.	8.4	8.0	10.6	13.9	15.4	17.8	17.4	16.0	13.3	9.9	7.4	8.2
2 p.m.	8.7	9.0	12.2	15.6	17.0	19.8	19.7	18.5	15.7	11.8	8.0	8.5
3 p.m.	8.8	10.5	13.4	16.7	18.0	20.8	21.0	20.2	17.7	13.4	9.2	8.4
4 p.m.	8.6	10.8	14.1	17.3	18.5	21.3	21.6	20.9	18.5	14.0	9.4	8.1
5 p.m.	8.0	10.8	14.1	16.9	18.1	21.0	22.0	20.8	18.4	14.1	9.6	7.7
6 p.m.	7.6	9.8	13.1	15.9	17.1	20.1	20.7	19.9	17.0	13.2	8.8	7.6
7 p.m.	7.3	9.0	11.6	14.3	15.2	18.2	18.7	17.5	14.8	11.0	7.7	7.0
8 p.m.	6.8	8.3	9.9	12.3	13.1	16.1	16.2	15.2	12.0	9.0	6.7	6.7
9 p.m.	6.5	7.4	8.6	10.6	11.3	13.5	14.0	13.3	10.0	7.7	6.1	6.6
10 p.m.	6.1	7.0	7.8	9.5	10.0	11.8	12.3	11.3	9.0	6.6	5.6	6.4
11 p.m.	5.9	6.4	7.2	8.6	9.0	10.8	10.8	10.2	8.2	6.0	5.2	6.2
12 midnight	6.0	6.1	6.8	7.8	8.3	10.1	10.0	9.4	7.4	5.6	5.1	6.0
Average	7.0	7.6	8.8	10.4	11.3	13.0	13.1	12.3	10.1	7.8	6.6	7.0

Monthly relative humidity.

Month.	A. M.	P. M.	Average.	Month.	A. M.	P. M.	Average.
January	Per ct.	Per ct.	Per ct.	July	Per ct.	Per ct.	Per ct.
February	83	75	79	August	89	80	84
March	83	73	78	September	90	82	86
April	82	73	78	October	88	78	83
May	83	74	78	November	85	74	80
June	84	74	79	December	82	71	76
	86	75	80		84	76	80

Dates of snowfall in San Francisco since March 1, 1871.

January 21, 1876.—Light snow fell for 10 minutes.

December 31, 1882.—Heavy snow fell from 11.30 a.m. to 4.20 p.m.; amount, 3.5 inches.

February 6, 1883.—A few flakes of snow fell during the day.

February 7, 1884.—Snow fell at intervals during the day, depth varying from 1 to 2 inches.

February 5, 1887.—Snow fell during the day; depth at office 3.7 inches, while in the western portion of the city it was fully 7 inches deep.

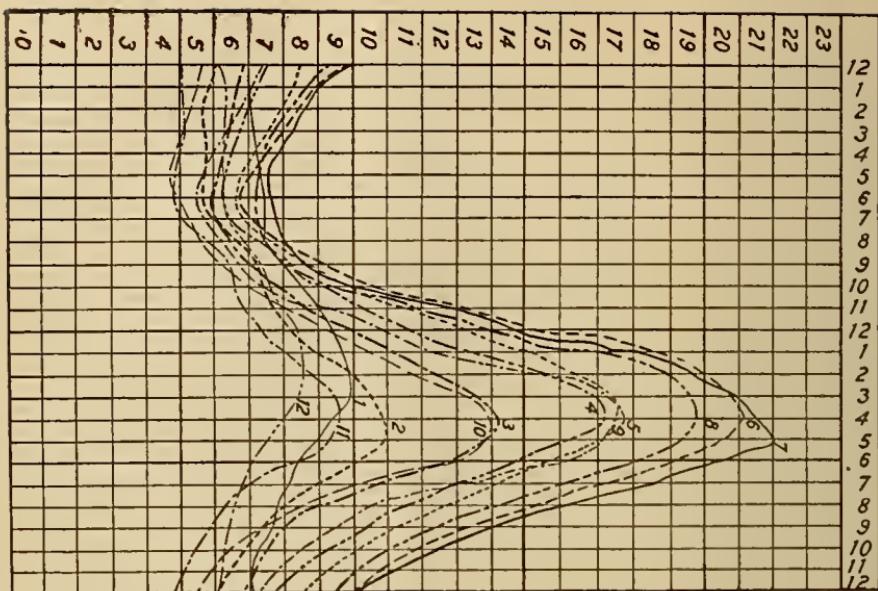
January 4, 1888.—A few flakes of snow fell during the day.

January 16, 1888.—Light snow fell to the depth of 0.1 inch.

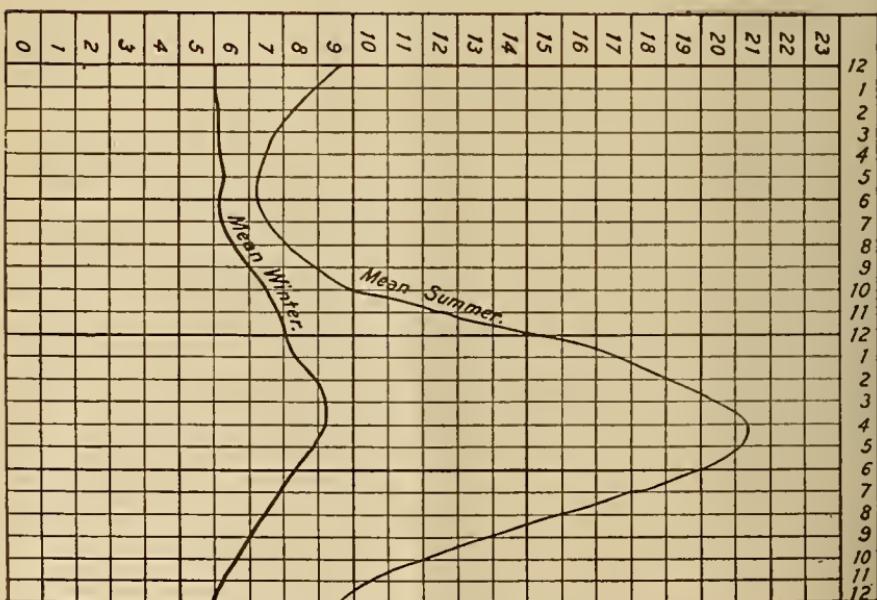
March 2, 1894.—A few flakes of snow fell during the day.

March 2, 1896.—Snow mixed with rain fell at intervals during the day.

March 3, 1896.—Heavy snow fell during the night; depth at office at 8 a.m., 1 inch.



Monthly curves of hourly wind velocities.



Hourly wind velocities at San Francisco.

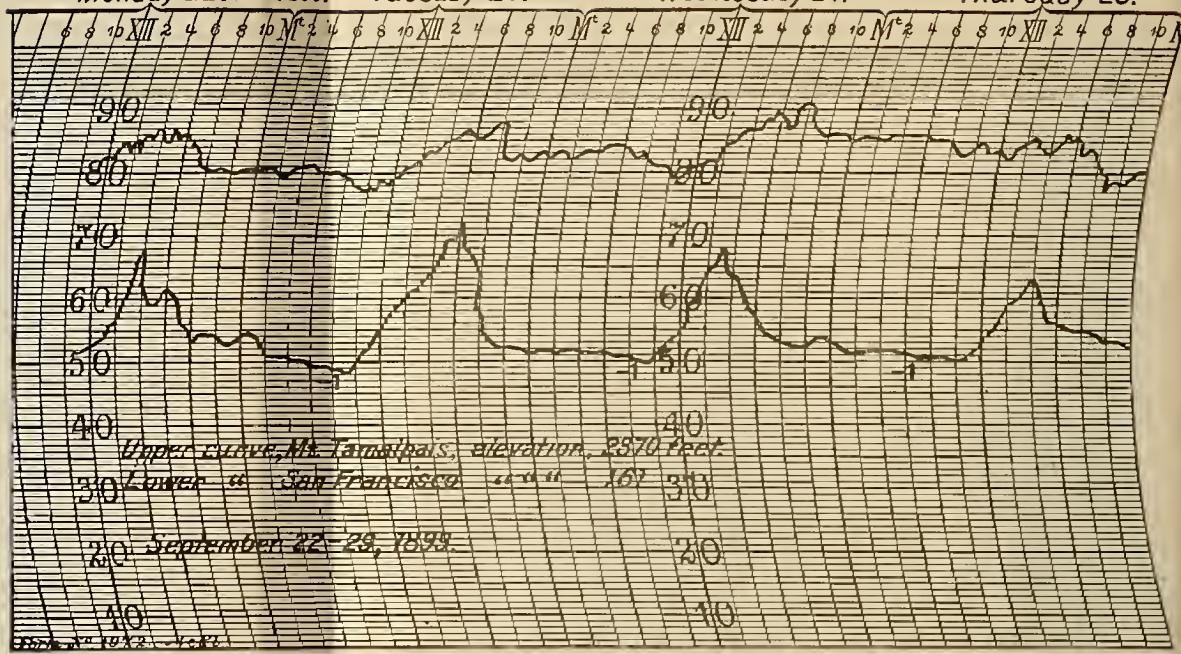
Monday 22.

1899.

Tuesday 23.

Wednesday 24.

Thursday 25.

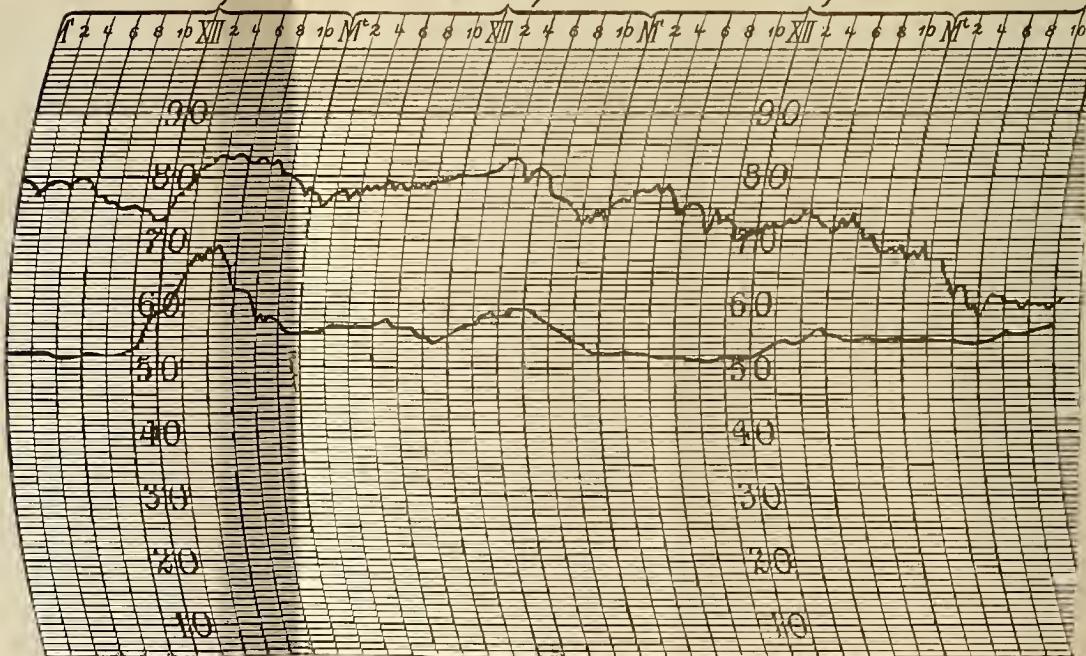


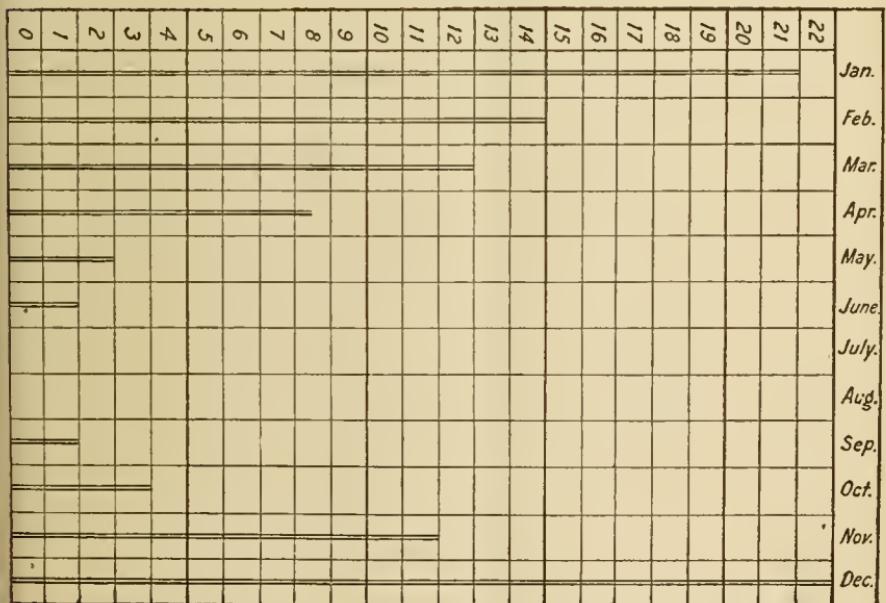
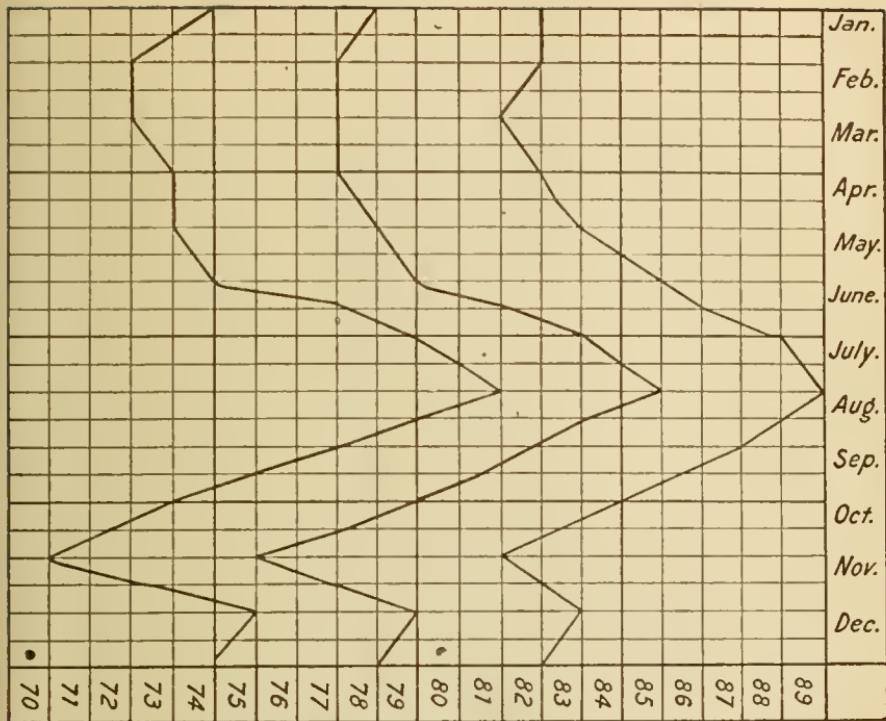
Friday 26.

Saturday 27.

Sunday 28.

Mon.





Percentage annual rainfall each month.—From Bulletin D, by A. J. Henry.
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*Rainfall record of Thomas Tennent, made at the foot of Market street, San Francisco,
beginning October 1, 1849.*

Date.	Rainfall.	Date.	Rainfall.	Date.	Rainfall.	Date.	Rainfall.
1849.		1851.		1852.		1853.	
	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>
Oct. 9.....	1.20	Feb. 5.....	0.02	Mar. 27.....	0.25	May 27.....	0.01
10.....	.25	6.....	.11	31.....	.30	Aug. 30.....	.04
30.....	1.69	18.....	.04	Apr. 22.....	.17	Sept. 15.....	.11
Nov. 2.....	1.84	20.....	.12	25.....	.02	17.....	.10
4.....	.25	21.....	.12	27.....	.07	24.....	.02
5.....	1.18	24.....	.13	May 17.....	.32	26.....	.23
6.....	1.45	Mar. 18.....	.23	Oct. 28.....	.80	Oct. 10.....	.10
8.....	1.94	19.....	.40	Nov. 9.....	.02	17.....	.02
10.....	.71	20.....	.08	11.....	.40	Nov. 9.....	.11
13.....	.45	21.....	.02	13.....	.30	10.....	.02
16.....	.84	22.....	.03	14.....	.80	11.....	.02
Dec. 3.....	.45	24.....	.03	15.....	.25	12.....	.15
11.....	1.30	25.....	.22	17.....	.20	13.....	.08
12.....	.84	27.....	.58	18.....	.62	14.....	.25
13.....	.15	28.....	.22	21.....	1.10	15.....	.37
16.....	.34	29.....	.21	23.....	.12	17.....	.14
17.....	.05	30.....	.12	28.....	.30	18.....	.02
18.....	.22	Apr. 2.....	.28	29.....	1.16	25.....	.68
19.....	1.21	3.....	.18	30.....	.04	26.....	.40
20.....	.37	4.....	.06	Dec. 1.....	.82	27.....	.04
21.....	.54	8.....	.42	2.....	.06	Dec. 4.....	.05
26.....	.41	9.....	.06	3.....	.19	5.....	.01
31.....	.32	16.....	.13	4.....	.21	9.....	.20
		17.....	.06	5.....	.20	10.....	1.35
1850.		19.....	.04	14.....	.52	12.....	.11
		May 18.....	.58	15.....	.03	13.....	.02
Jan. 1.....	.25	19.....	.06	16.....	.20	19.....	.10
2.....	1.10	20.....	.03	17.....	3.00	20.....	.33
4.....	.15	June 6.....	.02	18.....	1.40	22.....	.01
6.....	.05	Aug. 17.....	.02	19.....	.05	23.....	.02
8.....	1.45	Sept. 7.....	1.03	21.....	.21	28.....	.12
13.....	.25	Oct. 2.....	.18	22.....	.07		
14.....	.60	7.....	.03	23.....	.76	1854.	
17.....	.25	Nov. 8.....	1.47	24.....	.11		
20.....	.15	16.....	.37	25.....	2.54	Jan. 12.....	.59
22.....	.05	18.....	.03	28.....	.31	13.....	1.22
23.....	.58	20.....	.24	29.....	1.72	14.....	.27
24.....	.48	29.....	.10	30.....	.75	15.....	.29
25.....	.25	Dec. 2.....	.03	31.....	.05	16.....	.32
26.....	.53	3.....	.85			18.....	.15
29.....	2.20	4.....	.12	1853.		22.....	.01
Feb. 4.....	.45	5.....	.23			23.....	.42
6.....	.15	19.....	.28	Jan. 3.....	.02	24.....	.55
22.....	.18	20.....	.14	4.....	.04	25.....	.00
26.....	.99	21.....	.06	5.....	.69	Feb. 4.....	.22
Mar. 1.....	.12	22.....	2.00	6.....	.01	5.....	.51
6.....	.84	23.....	.55	7.....	2.06	6.....	.16
7.....	1.05	24.....	.60	8.....	.13	9.....	.70
8.....	.71	25.....	.20	10.....	.20	10.....	.52
15.....	.76	26.....	.30	11.....	.33	11.....	.12
18.....	.58	27.....	.26	14.....	.18	12.....	1.06
22.....	.47	28.....	.24	27.....	.25	19.....	.01
Apr. 19.....	.32	29.....	.30	28.....	.01	20.....	.05
25.....	.12	30.....	.82	Feb. 22.....	.29	21.....	.91
26.....	.02	31.....	.12	23.....	.15	22.....	
Sept. 12.....	.10			24.....	.37	23.....	
15.....	.15	1852.		25.....	.34	25.....	.56
21.....	.07			20.....	.27	26.....	.48
23.....	.01	Jan. 2.....	.07	Mar. 8.....	.14	27.....	1.26
Nov. 19.....	.47	4.....	.03	14.....	.76	28.....	.13
21.....	.10	28.....	.16	15.....	.02	Mar. 2.....	.02
22.....	.04	30.....	.32	27.....	2.85	3.....	.20
23.....	.11	Feb. 6.....	.05	28.....	.62	4.....	.07
24.....	.02	17.....	.02	29.....	.47	12.....	.07
28.....	.13	28.....	.03	Apr. 11.....	.81	13.....	2.25
29.....	.05	29.....	.04	13.....	.36	14.....	.50
Dec. 1.....	.08	Mar. 1.....	.30	16.....	3.45	15.....	.20
11.....	.26	2.....	.15	17.....	.14	17.....	.03
13.....	.35	3.....	.60	19.....	.07	19.....	.13
17.....	.36	4.....	.02	20.....	.11	23.....	.02
		5.....	.80	28.....	.08	29.....	.02
1851.		6.....	1.20	29.....	.35	Apr. 8.....	.01
		7.....	.75	May 1.....	.02	9.....	.01
Jan. 4.....	.11	8.....	1.15	10.....	.02	10.....	.03
5.....	.18	9.....	.70	11.....	.25	11.....	.20
6.....	.09	10.....	.32	12.....	.03	19.....	.05
7.....	.22	14.....	.10	20.....	.02	20.....	.43
26.....	.12	15.....	.04	24.....	.03	21.....	.25

Rainfall record of Thomas Tennent, made at the foot of Market street, San Francisco, beginning October 1, 1849—Continued.

Date.	Rainfall.	Date.	Rainfall.	Date.	Rainfall.	Date.	Rainfall.
1854.		1855.		1856.		1858.	
	Inches.		Inches.		Inches.		Inches.
Apr. 24.	.42	Nov. 21.	.10	Dec. 23.	.20	Feb. 7.	.03
28.	1.72	22.	.21	24.	.24	13.	.05
May 19.	.02	23.	.13	27.	.20	14.	.30
June 11.	.03	28.	.08	29.	.08	15.	.44
17.	.05	30.	.08	30.	.48	16.	.41
Aug. 1.	.01	Dec. 3.	.10	31.	1.39	17.	.25
Sept. 3.	.04	4.	.07			19.	.20
10.	.06	5.	.17			20.	.15
15.	.05	6.	.30			Mar. 12.	.52
Oct. 4.	.18	7.	1.15	Jan. 2.	.15	16.	.17
9.	.22	10.	.23	3.	.44	17.	.04
10.	.23	13.	.22	4.	.21	24.	.40
13.	.20	14.	.05	5.	.12	26.	.37
22.	.10	15.	.20	16.	.24	27.	1.80
23.	.31	19.	.24	17.	1.19	28.	.60
24.	.65	20.	.38	18.	.10	29.	1.65
25.	.22	21.	.75	Feb. 4.	.37	Apr. 1.	.42
26.	.32	22.	.10	5.	.43	4.	.27
Nov. 18.	.32	26.	.80	10.	.07	7.	.72
22.	.02	27.	1.00	11.	.05	8.	.14
Dec. 2.	.02			12.	.31	May 19.	.23
3.	.04	1856.		13.	.53	20.	.06
7.	.06			14.	1.27	21.	.05
31.	.75	Jan. 8.	.38	15.	1.30	June 18.	.05
		9.	1.05	16.	.84	July 27.	.02
1855.		10.	1.04	18.	.04	28.	.03
		11.	.72	19.	.04	Aug. 14.	.04
Jan. 1.	1.26	14.	.67	24.	.87	26.	.12
2.	.32	15.	.32	25.	1.17	Oct. 20.	.30
3.	.80	20.	.55	26.	.85	21.	2.06
4.	.15	21.	.10	27.	.45	23.	.12
5.	.03	22.	1.14	Mar. 1.	.13	24.	.26
6.	.08	23.	.47	8.	.03	Nov. 19.	.27
7.	.32	24.	1.22	21.	.18	20.	.20
8.	.20	25.	1.08	22.	.03	21.	.14
9.	.17	30.	.66	24.	.29	22.	.04
30.	.19	Feb. 4.	.03	27.	.36	26.	.04
31.	.06	19.	.12	28.	.47	Dec. 4.	.07
Feb. 1.	.09	20.	.33	31.	.13	5.	.27
7.	.05	28.	.02	May 6.	.01	10.	1.80
8.	.24	Mar. 14.	1.02	10.	.02	11.	1.02
10.	.22	28.	.05	30.	.02	12.	.08
22.	.15	29.	.10	June 29.	.12	14.	.17
23.	.11	30.	.20	Aug. 10.	.03	17.	.06
25.	.25	31.	.23	28.	.02	21.	.05
26.	1.29	Apr. 2.	.32	Oct. 6.	.17	23.	.42
27.	.52	9.	.21	7.	.44	24.	.64
28.	1.85	10.	.58	8.	.32	26.	.28
Mar. 1.	.54	11.	1.04	Nov. 2.	.10		1.04
2.	.34	12.	.17	3.	.35		.20
3.	.16	30.	.62	4.	.88		.04
4.	.56	May 19.	.28	5.	.31		
5.	.10	21.	.08	24.	.15	1859.	
7.	.23	22.	.40	25.	.49		
8.	.03	June 1.	.03	26.	.14	Jan. 27.	.05
12.	.20	July 26.	.02	27.	.17	28.	.21
13.	.04	Sept. 10.	.02	28.	.04	30.	.17
14.	.03	11.	.05	29.	.33	31.	.85
30.	1.21	Oct. 7.	.31	30.	.05	Feb. 1.	.24
31.	1.20	14.	.01	Dec. 4.	.15	6.	.16
Apr. 1.	.10	16.	.02	5.	.20	7.	.08
10.	.80	17.	.03	6.	.26	8.	.54
11.	.38	24.	.08	9.	.22	9.	.11
12.	.17	Nov. 15.	.16	10.	.43	10.	.12
13.	.50	16.	.06	11.	1.68	11.	.62
14.	1.65	17.	.20	12.	.22	12.	.78
15.	1.05	20.	.90	24.	.98	13.	.14
16.	.19	21.	.17			15.	.34
17.	.10	22.	.70			16.	.14
27.	.05	24.	.22			17.	1.04
May 2.	.03	28.	.06	Jan. 7.	.03	23.	.13
11.	.05	29.	.32	10.	.25	24.	.34
13.	.30	Dec. 7.	.15	11.	.37	25.	.12
14.	1.15	11.	.28	12.	.40	26.	.08
19.	.10	12.	.21	13.	.51	27.	1.11
20.	.25	14.	.04	20.	.83	28.	.23
Nov. 10.	.02	15.	.03	21.	.55	Mar. 3.	.21
13.	.05	17.	.45	22.	1.42	4.	.29

Rainfall record of Thomas Tennent, made at the foot of Market street, San Francisco, beginning October 1, 1849—Continued.

Date.	Rainfall.	Date.	Rainfall.	Date.	Rainfall.	Date.	Rainfall.
— 1859.		1860.		1861.		1862.	
	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>
Mar. 7.....	.20	Apr. 8.....	.44	Mar. 30.....	.03	Mar. 28.....	.07
8.....	.20	19.....	.09	Apr. 2.....	.16	29.....	.20
20.....	.15	May 2.....	.12	3.....	.15	30.....	.20
21.....	1.07	3.....	.62	4.....	.03	Apr. 1.....	.11
22.....	.73	4.....	.43	24.....	.17	2.....	.13
26.....	.03	5.....	.12	May 3.....	.10	3.....	.07
27.....	.04	11.....	.17	20.....	.65	4.....	.01
29.....	.03	18.....	.39	21.....	.25	8.....	.09
30.....	.07	22.....	.35	June 5.....	.04	9.....	.17
Apr. 8.....	.13	23.....	.28	12.....	.04	11.....	.01
10.....	.03	24.....	.04	Sept. 2.....	.02	13.....	.02
11.....	.02	25.....	.28	Nov. 10.....	.27	14.....	.12
30.....	.09	26.....	.06	12.....	.74	May 2.....	.02
May 1.....	.38	June 6.....	.07	13.....	.29	3.....	.56
2.....	1.07	28.....	.02	14.....	.05	11.....	.03
22.....	.06	July 10.....	.21	15.....	.08	12.....	.11
23.....	.04	Oct. 3.....	.01	16.....	.39	18.....	.02
Aug. 3.....	.02	4.....	.12	17.....	.22	June 11.....	.05
Sept. 15.....	.03	5.....	.08	19.....	.56	Oct. 4.....	.05
Oct. 23.....	.05	6.....	.01	26.....	.48	16.....	.07
Nov. 2.....	.06	17.....	.04	27.....	.60	29.....	.02
3.....	.36	19.....	.17	29.....	.08	30.....	.38
4.....	.90	20.....	.08	30.....	.34	Nov. 6.....	.11
5.....	.84	24.....	.12	Dec. 1.....	.05	7.....	.02
6.....	.92	27.....	.03	3.....	.07	10.....	.02
7.....	.80	28.....	.11	6.....	1.02	Dec. 9.....	.19
8.....	.13	29.....	.04	7.....	.29	18.....	.12
17.....	.07	30.....	.10	8.....	1.65	20.....	.05
21.....	.14	Nov. 11.....	.21	9.....	.18	21.....	.32
22.....	.23	12.....	.35	16.....	.01	22.....	1.01
23.....	.25	28.....	.02	22.....	.03	23.....	.17
24.....	.31	Dec. 1.....	.02	23.....	1.06	24.....	.14
25.....	1.73	6.....	.04	24.....	.56	50.....	.22
26.....	.51	7.....	.13	26.....	2.02	31.....	.13
30.....	.03	10.....	.02	27.....	.23		
Dec. 4.....	.04	11.....	.13	28.....	.17	1863.	
23.....	.21	12.....	.07	29.....	.70		
24.....	.63	14.....	.37	30.....	1.25	Jan. 1.....	.27
25.....	.38	15.....	.23	31.....	.25	3.....	.12
26.....	.21	16.....	.78			4.....	.71
27.....	.10	17.....	.04	1862.		5.....	.46
		18.....	.26			11.....	.15
1860.		19.....	.27	Jan. 5.....	2.67	19.....	.74
		20.....	.21	6.....	1.49	20.....	.36
Jan. 1.....	.08	21.....	.15	8.....	1.35	22.....	.76
2.....	.07	22.....	.58	9.....	3.50	23.....	.06
3.....	.24	23.....	1.03	10.....	2.46	Feb. 5.....	.44
4.....	.21	24.....	.77	11.....	1.25	6.....	.16
5.....	.56	25.....	.63	13.....	.22	8.....	.11
6.....	.22	26.....	.13	15.....	.49	11.....	.16
7.....	.23	27.....	.07	16.....	2.46	12.....	.71
22.....	.03	31.....	.23	17.....	2.64	14.....	.11
Feb. 7.....	.60			18.....	.52	16.....	.40
12.....	.10	1861.		19.....	.72	17.....	.58
13.....	.43			20.....	1.69	18.....	.47
16.....	.04	Jan. 1.....	.21	21.....	.55	20.....	.05
17.....	.17	4.....	1.03	22.....	1.00	Mar. 7.....	.05
18.....	.14	5.....	.49	27.....	.04	17.....	.16
29.....	.12	6.....	.23	29.....	.76	18.....	.19
Mar. 1.....	.40	15.....	.03	30.....	.55	19.....	.11
5.....	.37	19.....	.14	Feb. 2.....	.79	20.....	.56
6.....	.03	20.....	.22	5.....	.04	24.....	.04
10.....	.13	23.....	.12	19.....	.44	25.....	.07
12.....	.03	Feb. 7.....	.06	21.....	2.09	26.....	.88
15.....	.10	9.....	.12	22.....	.80	Apr. 8.....	.19
16.....	.17	10.....	.14	23.....	.84	13.....	.32
22.....	.39	11.....	2.02	24.....	.33	14.....	.10
23.....	.11	21.....	.21	25.....	1.49	15.....	.38
27.....	.05	23.....	.08	26.....	.38	16.....	.32
28.....	.90	24.....	.10	27.....	.33	20.....	.24
29.....	.62	25.....	.99	Mar. 7.....	.02	21.....	.10
31.....	.69	Mar. 23.....	.79	9.....	.01	26.....	.12
Apr. 1.....	.49	24.....	.07	10.....	.47	27.....	.04
3.....	.05	25.....	.04	11.....	.57	May 18.....	.14
4.....	1.32	26.....	2.53	12.....	.18	19.....	.09
5.....	.65	27.....	.40	14.....	.25	Sept. 19.....	.03
6.....	.06	28.....	.04	15.....	.11	Nov. 11.....	.05
7.....	.04	29.....	.18	16.....	.12	12.....	.07

Rainfall record of Thomas Tennent, made at the foot of Market street, San Francisco, beginning October 1, 1849—Continued.

Date.	Rainfall.	Date.	Rainfall.	Date.	Rainfall.	Date.	Rainfall.
1863.		1865.		1866.		1867.	
	Inches.		Inches.		Inches.		Inches.
Nov. 14.	.87	Jan. 26.	.38	Mar. 18.	.21	Mar. 21.	.34
15.	.92	27.	.74	19.	.41	30.	.05
16.	.64	28.	.91	20.	.23	31.	.30
Dec. 1.	.33	31.	1.50	25.	.36	Apr. 1.	.32
9.	.15	Feb. 13.	.30	29.	.02	2.	.15
10.	.05	14.	.10	30.	.11	5.	.49
11.	.02	15.	.08	31.	.49	6.	.15
13.	.27	16.	.12	Apr. 29.	.12	9.	.02
21.	.37	18.	.40	May 21.	.06	10.	.67
23.	.52	19.	.24	22.	.22	11.	.50
24.	.09	27.	.05	25.	1.05	12.	.15
1864.		Mar. 3.	.21	27.	.05	Sept. 14.	.94
		4.	.38	28.	.07	Oct. 5.	.20
Jan. 1.	.12	12.	.07	June 8.	.04	Nov. 5.	.62
5.	.39	19.	.08	Sept. 6.	.07	6.	.75
15.	.14	Apr. 6.	.21	15.	.04	19.	.79
29.	.37	7.	.62	Nov. 2.	.68	21.	.75
31.	.81	9.	.11	3.	.25	24.	.44
Mar. 15.	.03	May 18.	.45	4.	.14	25.	.06
17.	.04	19.	.18	Oct. 7.	.5.	Dec. 1.	.02
18.	.89	Sept. 24.	.06	16.	.26	2.	.18
20.	.02	26.	.18	19.	.26	7.	.15
27.	.06	Oct. 8.	.03	24.	.38	8.	.55
28.	.14	25.	.07	25.	.29	9.	.24
29.	.09	30.	.01	26.	.28	10.	.33
30.	.07	Nov. 13.	.15	29.	.17	16.	.04
31.	.18	14.	.18	29.	.14	17.	1.62
Apr. 1.	.91	16.	.37	30.	.53	18.	.69
3.	.35	17.	.07	Dec. 1.	.53	20.	.48
4.	.23	18.	1.03	3.	.13	21.	.84
26.	.08	19.	.27	11.	.53	22.	1.68
May 10.	.01	20.	.06	12.	.01	23.	.72
11.	.10	21.	.06	15.	.63	24.	.08
13.	.01	22.	.63	16.	.43	25.	1.35
14.	.11	29.	1.12	18.	.95	30.	.21
17.	.55	30.	.40	19.	4.28	31.	1.45
Aug. 22.	.11	Dec. 1.	.01	20.	3.62		
23.	.03	2.	.01	21.	.64	1868.	
24.	.07	8.	.04	22.	.31		
Sept. 7.	.01	13.	.06	24.	.06	Jan. 1.	.93
Oct. 24.	.02	22.	.04	25.	.71	2.	.33
26.	.05	23.	.15	26.	.56	3.	.12
27.	.06	24.	.25	27.	.32	4.	.15
Nov. 15.	.14	26.	.02	28.	.63	8.	.66
23.	.05			29.	.40	11.	.12
25.	.48	1866.		30.	.42	12.	.87
26.	3.98					13.	.43
27.	.42	Jan. 5.	.30	1867.		16.	.12
28.	.44	6.	.19			18.	.41
29.	.50	7.	.41	Jan. 1.	.03	19.	.43
30.	.67	8.	1.51	4.	.18	20.	.64
Dec. 2.	.33	10.	.40	5.	.65	22.	1.08
3.	.13	11.	.46	6.	.51	23.	.99
4.	.03	12.	.60	11.	.11	24.	.84
5.	.04	13.	.60	12.	.75	25.	.36
6.	.92	16.	.23	14.	.05	26.	1.02
10.	.01	17.	2.17	19.	.23	Feb. 7.	.06
11.	1.05	19.	.11	20.	.18	21.	.64
12.	2.56	20.	.22	21.	.58	22.	.54
13.	.99	21.	1.14	22.	.17	23.	.14
14.	.04	22.	.15	23.	.40	24.	.86
15.	.27	23.	.08	24.	.35	25.	.69
23.	.38	24.	.31	26.	.78	26.	1.61
25.	.47	Feb. 1.	.36	30.	.19	27.	1.02
26.	.81	2.	.16	Feb. 18.	.49	28.	.37
28.	.02	3.	.43	19.	.15	29.	.20
29.	.04	4.	.19	20.	.12	Mar. 1.	.56
30.	.30	5.	.22	21.	2.22	2.	.20
31.	.52	9.	.16	22.	.30	3.	1.55
		12.	.06	25.	.08	4.	.55
1865.		27.	.07	26.	.14	11.	.19
		28.	.47	27.	1.02	13.	.56
Jan. 1.	.51	Mar. 5.	.02	28.	.68	14.	.44
6.	.08	6.	.21	Mar. 1.	.17	15.	.14
18.	.07	8.	.66	2.	.16	20.	.16
24.	.07	9.	.30	8.	.40	21.	1.05
25.	.88	17.	.02	17.	.16	22.	.90

Rainfall record of Thomas Tennent, beginning October 1, 1849, and ending February 28, 1871.

Date.	Rainfall.	Date.	Rainfall.	Date.	Rainfall.	Date.	Rainfall.
1868.		1869.		1871.		1872.	
	Inches.		Inches.		Inches.		Inches.
Apr. 3.....	0.10	June 15.....	0.02	Jan. 17.....	0.21	Feb. 14.....	0.12
7.....	.20	Sept. 1.....	.12	18.....	.78	15.....	.02
9.....	.38	Oct. 18.....	.02	22.....	.28	16.....	.49
10.....	.30	19.....	.17	23.....	.62	17.....	.22
11.....	.70	20.....	.36	28.....	.44	18.....	.08
12.....	.47	21.....	.74	Feb. 4.....	.37	21.....	.42
13.....	.06	Nov. 6.....	.14	6.....	.12	22.....	.73
14.....	.04	10.....	.65	8.....	.02	24.....	1.28
15.....	.06	11.....	.20	13.....	.14	25.....	.02
May 13.....	.01	12.....	.05	14.....	.13	26.....	.13
19.....	.02	13.....	.05	15.....	.67	27.....	.94
June 1.....	.01	27.....	.04	20.....	.72	Mar. 1.....	.16
12.....	.05	28.....	.06	21.....	1.02	5.....	.73
23.....	.17	Dec. 7.....	.41	22.....	.28	8.....	.02
Oct. 1.....	.06	8.....	1.10	10.....	.29	9.....	.28
2.....	.08	10.....	.13	Mar. 6.....	.26	12.....	.19
4.....	.01	11.....	.14	12.....	.02	27.....	.02
Nov. 4.....	.05	22.....	.22	14.....	.01	31.....	.19
18.....	.30	23.....	.46	15.....	.01	Apr. 13.....	.06
19.....	.64	24.....	.51	17.....	.12	15.....	.35
25.....	.08	25.....	1.34	18.....	.62	16.....	.22
29.....	.11			19.....	.28	17.....	.04
Dec. 4.....	.01	1870.		23.....	.57	19.....	.30
17.....	.05			25.....	.02	26.....	.09
18.....	.55	Jan. 10.....	.09	Apr. 4.....	.13	27.....	.02
21.....	.07	11.....	.11	5.....	.07	May 24.....	.02
22.....	.18	12.....	.14	6.....	1.28	30.....	.01
23.....	1.20	13.....	.35	8.....	.01	31.....	.15
24.....	.29	14.....	.53	16.....	.39	June 4.....	.02
25.....	.47	15.....	.31	17.....	.01	5.....	.01
26.....	.92	18.....	.76	May 7.....	.01	16.....	.01
29.....	.18	19.....	1.03	16.....	.04	July 27.....	.01
30.....	.32	20.....	.27	27.....	.05	Sept. 26.....	.04
31.....	.10	22.....	.30	29.....	.13	Oct. 26.....	.11
		Feb. 9.....	.41	June 14.....	.01	Nov. 4.....	.15
1869.		10.....	.02	Aug. 5.....	.02	12.....	.43
		12.....	.14	Oct. 27.....	.07	13.....	.01
Jan. 1.....	1.28	14.....	.11	Nov. 3.....	.09	28.....	.01
2.....	.53	15.....	.34	14.....	.01	29.....	2.06
7.....	.10	19.....	.08	15.....	.27	30.....	.13
10.....	.01	20.....	.80	25.....	.12	Dec. 4.....	.02
11.....	.07	21.....	.25	26.....	1.20	22.....	.63
14.....	.08	22.....	.90	27.....	.11	23.....	.42
22.....	.15	23.....	1.57	28.....	1.01	24.....	1.48
23.....	1.45	24.....	.10	Dec. 2.....	.10	25.....	1.39
24.....	.19	Mar. 1.....	.11	17.....	.25	26.....	1.47
25.....	.25	10.....	.02	18.....	2.83	27.....	.06
26.....	.20	11.....	.14	19.....	3.12	28.....	.32
27.....	.15	12.....	.18	20.....	.30	29.....	.06
28.....	.54	16.....	.22	21.....	.91	30.....	.05
29.....	1.10	17.....	1.05	23.....	2.48	31.....	.05
30.....	.25	23.....	.27	24.....	.19		
Feb. 2.....	.44	30.....	.01	26.....	.04	1873.	
3.....	.30	Apr. 1.....	.48	27.....	1.05		
7.....	.20	2.....	.21	28.....	.40	Jan. 1.....	.06
8.....	.82	3.....	.09	29.....	.82	2.....	.09
9.....	.32	8.....	.01	30.....	.17	3.....	.06
10.....	1.67	11.....	.16	31.....	1.70	5.....	.10
11.....	.15	12.....	.58			8.....	.01
Mar. 12.....	.05	May 2.....	.02	1872.		11.....	.12
13.....	.08	19.....	.18			30.....	.12
14.....	.10	Sept. 30.....	.03	Jan. 2.....	.01	31.....	1.02
15.....	.14	Nov. 4.....	.01	3.....	.71	Feb. 1.....	.02
16.....	.63	6.....	.02	5.....	.19	2.....	.27
17.....	.55	7.....	.22	6.....	.08	3.....	.13
18.....	.18	29.....	.18	7.....	.05	4.....	.27
19.....	.48	Dec. 1.....	.59	8.....	2.36	5.....	.01
20.....	.67	2.....	.57	9.....	.34	8.....	.64
24.....	.01	5.....	1.42	11.....	.17	9.....	.23
26.....	.10	6.....	.12	12.....	.01	11.....	.19
29.....	.15	7.....	.32	13.....	.01	12.....	.16
Apr. 7.....	.28	13.....	.09	31.....	.07	13.....	.05
16.....	.45	14.....	.27	Feb. 2.....	.07	15.....	.12
17.....	.69			4.....	.16	16.....	.13
18.....	.68	1871.		7.....	.46	18.....	.82
19.....	.09			8.....	.65	24.....	.05
May 19.....	.06	Jan. 9.....	.42	9.....	.69	26.....	.02
21.....	.02	10.....	.32	11.....	.42	27.....	.75

Rainfall record of the Signal Service, San Francisco, beginning March 1, 1871—Cont'd.

Date.	Rainfall.	Date.	Rainfall.	Date.	Rainfall.	Date.	Rainfall.
1873.		1874.		1875.		1876.	
	Inches.		Inches.		Inches.		Inches.
Feb. 28	.08	Mar. 12	.65	Oct. 28	.02	Sept. 4	.20
Mar. 5	.47	13	.05	Nov. 1	.47	29	.18
6	.10	14	.53	6	.16	Oct. 16	.53
15	.11	15	.08	7	.01	17	.49
16	.09	16	.01	11	.11	18	.43
29	.01	25	.10	13	.57	25	.09
30	.01	26	.02	14	.10	27	1.06
Apr. 2	.05	27	.39	15	.29	28	.56
20	.14	Apr. 3	.04	16	.47	29	.20
21	.22	5	.04	17	2.30	Nov. 4	.06
28	.02	12	.70	18	1.13	16	.19
June 2	.01	13	.02	19	.05		
16	.01	30	.10	20	.03	1877.	
July 22	.01	May 1	.23	23	.05		
Aug. 5	.05	4	.03	24	.17	Jan. 16	.34
25	.03	5	.13	25	.01	17	.57
Oct. 6	.06	6	.20	26	1.18	18	.21
7	.77	22	.04	30	.27	19	.35
Nov. 6	.32	23	.03	Dec. 1	.52	21	.08
21	.04	June 6	.09	3	.44	28	.44
29	.01	7	.04	4	.10	29	.62
30	.79	23	.01	19	.38	30	1.63
Dec. 1	.03	Sept. 3	.02	24	.06	31	.08
3	1.61	Oct. 1	.02	25	.83	Feb. 1	.33
4	.85	9	.17	26	.19	2	.01
5	1.01	13	.02	28	1.50	12	.52
6	.15	16	.03	29	.02	13	.10
7	.42	18	.11	31	.11	20	.01
8	.10	21	.28			22	.05
9	.91	22	.03	1876.		25	.16
13	.06	25	1.58			Mar. 1	.04
14	.27	26	.25	Jan. 1	.22	2	.32
15	.14	27	.20	2	.52	6	.15
16	.57	Nov. 4	.04	3	1.47	9	.01
18	.04	5	1.34	4	.13	10	.56
19	.39	7	.04	6	.20	Apr. 3	.03
22	.34	22	.10	7	1.29	8	.08
28	.29	23	3.98	8	.15	14	.04
29	1.16	24	1.05	19	.25	15	.02
30	1.34	Dec. 1	.06	20	.18	16	.07
31	.04	2	.05	21	.04	19	.02
		3	.05	22	.65	May 28	.18
1874.		15	.02	23	1.50	June 27	.01
		25	.15	24	.42	July 16	.02
Jan. 1	.89			25	.12	Oct. 21	.27
2	.77	1875.		26	.36	22	.35
14	.05			27	.04	23	.01
15	.38	Jan. 10	.01	31	.01	25	.02
16	.39	11	.04	Feb. 7	.21	Nov. 2	.08
17	.79	13	.07	8	1.80	4	.21
18	.04	14	1.48	9	.21	5	.25
19	.82	16	.20	11	1.35	6	.07
20	.02	18	1.87	12	.01	11	.56
21	.08	19	1.92	24	.30	14	.04
22	.01	20	.01	25	.13	15	.06
25	.31	22	.53	27	.90	16	.17
26	.03	23	1.76	28	.01	22	Trace.
27	.11	24	.06	Mar. 2	.94	23	.13
28	.62	25	.06	3	1.03	Dec. 1	.23
30	.24	Feb. 1	.27	4	.32	16	.23
31	.11	2	.04	5	.02	17	.99
Feb. 2	.30	25	.01	6	.84	21	.36
6	.01	Mar. 2	.45	7	1.13	23	.49
9	.11	4	.23	8	.60	28	.36
10	.15	22	.01	12	.22		
11	.03	24	.22	13	.17	1878.	
12	.23	25	.01	29	.22		
13	.81	27	.05	Apr. 2	.23	Jan. 6	.02
14	.20	28	.33	7	.60	7	.28
16	.08	Apr. 5	.06	9	.18	8	.59
17	.28	30	.04	18	.09	10	.34
25	.01	May 6	.01	21	.15	13	Trace.
Mar. 1	.58	8	.14	29	.04	14	.52
3	.26	14	.07	May 19	.15	15	1.94
5	.13	June 13	.09	20	.09	16	1.97
7	.06	15	.53	June 20	.04	17	Trace.
8	.24	16	.40	July 6	.01	18	.28
11	.26	Oct. 27	.22	Aug. 14	.01	19	.10

Rainfall record of the Signal Service, San Francisco, beginning March 1, 1871—Cont'd.

Date.	Rainfall.	Date.	Rainfall.	Date.	Rainfall.	Date.	Rainfall.
1878.		1879.		1879.		1880.	
	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>
Jan. 20	Trace.	Jan. 9	0.22	Dec. 7	0.23	Dec. 15	0.36
21	.0.13	10	.83	8	.14	16	.26
22	1.15	11	.01	9	.09	17	.43
23	Trace.	13	.28	10	.09	18	.25
24	1.68	16	.05	18	.04	19	1.66
25	.02	22	.04	19	1.55	20	.79
26	.13	23	1.04	20	.11	21	Trace.
27	1.13	24	.29	21	.42	22	.27
28	.17	25	.33	22	.20	23	.47
29	.02	26	.15	28	.23	24	.98
30	.78	27	Trace.			25	.42
31	.72	28	.26	1880.		27	.41
Feb. 4	.95	30	.02			29	.16
5	Trace.	Feb. 8	.10	Jan. 7	.24		
6	.66	9	1.66	8	.12	1881.	
7	.33	10	.11	9	1.03	Jan. 13	.77
8	.14	11	.78	10	.03	14	.74
10	.02	12	.98	25	.16	15	.09
11	1.78	13	.04	26	.47	16	.17
12	.17	15	.51	27	.06	Feb. 9	
13	.61	16	.04			31	
14	1.92	17	.66	10	.18	19	
16	.42	18	.02	15	.14	26	
17	.92	Mar. 2	.13	18	.58	28	1.18
18	1.25	4	1.57	19	.22	29	4.67
19	.39	5	2.73	21	.33	30	.96
20	.14	6	1.14	22	.06	31	.05
23	.60	7	.95	23	.05	Feb. 1	.01
24	.40	8	.13	24	.09		Trace.
26	1.16	9	1.05	25	.57		1.00
27	.47	18	.25	3	.01		.06
28	.19	19	.20	4			.11
Mar. 3	.57	20	.16	17	.38		
4	.03	21	.03	28	.48		
5	Trace.	22	.32	29	.05		
6	1.01	24	.01	30	.03		
7	.07	25	Trace.	31	.03		
10	.07	26	Trace.	31	.03		
13	.73	Apr. 4	.03	Apr. 1	.25		
14	.26	5	.11	2	1.85		
17	.05	6	.30	3	.12		
18	.01	7	.10	4	Trace.		
19	Trace.	8	.07	5	.05		
20	.16	10	.24	6	.59	Mar. 1	.02
21	.30	13	.13	9	.77	13	.05
24	.28	14	.12	10	Trace.	15	.67
25	.15	18	.01	12	.11	11	Trace.
26	.15	19	.26	13	.07	15	.11
27	.37	20	.52	14	.59	24	Trace.
28	.02	May 6	.05	15	1.33	26	.01
29	.15	17	.93	16	.27	27	.04
30	.18	18	.22	17	.06	Apr. 5	.22
Apr. 4	Trace.	19	.74	18	.09	6	.02
14	.16	28	.41	19	.48	8	Trace.
15	.29	June 10	.05	20	1.81	9	.25
19	.61	July 9	.01	21	1.39	10	.34
20	Trace.	Aug. 22	.02	22	.23	16	Trace.
May 20	.05	Sept. 23	Trace.	May 2	Trace.	17	1.09
21	.09	Oct. 6	.43	4	.05	18	.01
30	.02	7	.13	5	.11	22	.01
June 6	Trace.	11	.07	10	.03	23	.06
7	.01	12	.15	11	.84	May 9	.05
July 17	.01	15	Trace.	12	.09	21	Trace.
Sept. 17	Trace.	Nov. 5	.03	Oct. 1	Trace.	31	.17
27	.03	6	.14	4	Trace.	June 3	.41
28	.07	8	.07	8	.05	7	.28
29	.11	9	.94	Nov. 1	.01	Sept. 22	Trace.
30	.34	11	.05	23	.31	Oct. 3	.25
Oct. 14	1.27	12	.16	24	.01	15	Trace.
Nov. 4	.11	13	.19	Dec. 1	1.22	25	.01
5	.01	14	.21	2	1.50	26	.20
14	.45	29	.86	3	.72	27	.01
Dec. 6	.14	30	1.38	4	.04	28	.12
7	.01	Dec. 1	.08	5	.50	30	.10
9	.08	2	.23	8	Trace.	Nov. 15	1.34
29	.04	3	.37	9	.08	16	.30
30	.31	5	.68	14	1.81	17	.02

Rainfall record of the Signal Service, San Francisco, beginning March 1, 1871—Cont'd.

Date.	Rainfall.	Date.	Rainfall.	Date.	Rainfall.	Date.	Rainfall.
1881.		1882.		1883.		1884.	
	Inches.		Inches.		Inches.		Inches.
Nov. 28.	.10	Oct. 10.	.19	Oct. 25.	.08	June 11.	.27
29.	.02	13.	.39	26.	1.19	12.	.96
30.	.16	24.	.03	27.	.05	13.	.48
Dec. 1.	.27	30.	.01	28.	Trace.	21.	Trace.
2.	.02	Nov. 1.	.37	Nov. 7.	.87	22.	.09
3.	.18	2.	1.85	8.	.45	23.	.10
4.	.87	3.	1.63	24.	.28	24.	Trace.
5.	.60	7.	Trace.	Dee. 2.	.11	Aug. 4.	.03
6.	.02	9.	.13	21.	.28	24.	.01
9.	.15	21.	.01	23.	.15	Sept. 7.	.12
10.	.03	23.	.15	24.	.17	8.	.09
11.	.31	26.	.03	25.	.12	30.	.12
15.	.52	29.	.01	26.	.01	Oct. 12.	.07
24.	.33	30.	Trace.	27.	.07	13.	1.10
26.	.37	Dee. 11.	.07	28.	.01	14.	.64
27.	.18	12.	.01	29.	Trace.	15.	.74
1882.		19.	.55	1884.		Nov. 9.	.07
		20.	.01			12.	.19
Jan. 2.	.12	22.	.08	Jan. 3.	.10	Dec. 16.	.10
3.	.08	24.	.09	5.	.48	17.	.60
4.	.14	28.	.14	8.	.04	18.	.57
5.	.03	31.	.76	25.	.08	19.	.63
6.	.06			26.	.50	20.	1.62
23.	.40	1883.		27.	.38	21.	.28
24.	.22			28.	.09	22.	.48
25.	.06	Jan. 1.	.57	29.	1.44	24.	.52
26.	.33	4.	Trace.	30.	.75	25.	.37
31.	.24	17.	.03	31.	.02	26.	.41
Feb. 9.	.03	24.	.91	Feb. 1.	.18	27.	.02
10.	.80	25.	.39	2.	.02	28.	.07
11.	.07	29.	.02	3.	.29		
12.	.28	Feb. 6.	.13	4.	.66	1885.	
13.	.05	10.	Trace.	5.	.83		
16.	.41	11.	Trace.	6.	.22	Jan. 1.	.42
23.	.10	12.	Trace.	7.	.20	2.	.03
24.	.52	13.	.40	10.	.01	7.	.05
25.	.06	14.	.51	11.	.01	8.	.01
26.	.60	Mar. 11.	Trace.	14.	.65	9.	.52
27.	.04	12.	.01	15.	1.17	10.	.50
Mar. 1.	.04	25.	Trace.	16.	1.29	11.	.29
2.	.02	26.	1.55	17.	.78	13.	.47
4.	Trace.	27.	.48	18.	.23	27.	.15
9.	.13	28.	.46	20.	.11	28.	.02
10.	.73	29.	.30	Mar. 3.	.04	29.	.06
11.	.34	30.	.18	4.	.02	30.	.01
12.	.13	31.	.03	5.	.07	Feb. 1.	.02
13.	.66	Apr. 2.	.09	6.	.45	2.	.06
14.	.49	3.	.46	7.	.51	18.	.09
15.	.63	7.	Trace.	8.	1.39	19.	.06
16.	.06	8.	Trace.	9.	1.94	20.	.06
17.	Trace.	11.	.02	10.	.07	21.	.01
18.	.18	12.	.10	14.	1.03	Mar. 9.	Trace.
19.	.04	19.	.76	15.	.04	10.	Trace.
Apr. 2.	.01	20.	Trace.	18.	.06	18.	.55
3.	.03	25.	Trace.	22.	.08	25.	.12
5.	.30	30.	.08	25.	1.00	30.	.16
8.	.27	May 1.	.01	26.	.12	31.	.18
9.	.44	4.	1.21	27.	.97	Apr. 2.	Trace.
10.	Trace.	5.	.88	28.	.45	3.	.01
19.	.06	6.	.58	Apr. 8.	.04	4.	.04
22.	.05	7.	Trace.	9.	1.43	5.	.03
24.	.06	8.	.03	10.	1.24	6.	.07
25.	Trace.	11.	.05	11.	1.41	7.	1.44
May 1.	.02	12.	.07	12.	.30	8.	1.11
2.	.14	13.	.04	13.	.04	9.	.25
3.	.02	15.	.58	14.	1.14	10.	.02
24.	.03	16.	.05	15.	.32	16.	.01
June 5.	Trace.	31.	.02	23.	.15	17.	.19
6.	.02	June 1.	.01	24.	Trace.	19.	Trace.
9.	Trace.	11.	Trace.	26.	.26	26.	Trace.
18.	Trace.	Sept. 2.	Trace.	May 18.	.10	28.	.01
19.	.02	21.	Trace.	24.	.12	May 10.	Trace.
Sept. 30.	.26	29.	.28	25.	.01	12.	Trace.
Oct. 1.	.20	30.	.14	June 1.	Trace.	13.	Trace.
3.	1.40	Oct. 22.	Trace.	7.	Trace.	14.	.04
6.	.29	23.	Trace.	8.	.54	18.	Trace.
7.	.15	24.	.10	9.	.13	31.	Trace.

Rainfall record of the Signal Service, San Francisco, beginning March 1, 1871—Cont'd.

Date.	Rainfall.	Date.	Rainfall.	Date.	Rainfall.	Date.	Rainfall.
1885.		1886.		1887.		1888.	
	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>
June 4.	Trace.	Mar. 15.	Trace.	Feb. 21.	0.34	Feb. 1.	0.05
9.	.09	16.	.01	24.	.32	10.	.20
10.	.10	17.	.65	Mar. 1.	Trace.	11.	.24
21.	Trace.	23.	Trace.	2.	.14	12.	.34
July 2.	.01	31.	.26	3.	.52	13.	Trace.
8.	.65	Apr. 1.	.49	4.	.08	14.	.10
Sept. 5.	Trace.	2.	.03	17.	.06	Mar. 1.	.01
24.	.11	6.	.49	18.	.04	2.	.90
Oct. 13.	.40	7.	.24	Apr. 6.	.43	3.	.35
14.	.31	8.	.08	7.	.02	18.	.18
16.	Trace.	9.	1.01	8.	1.37	4.	1.21
29.	.01	10.	1.14	9.	.13	5.	.17
Nov. 1.	.01	11.	.30	12.	.01	7.	.05
3.	.03	12.	.36	13.	.04	8.	.02
4.	.78	13.	.23	14.	Trace.	13.	.15
7.	.17	15.	.23	19.	Trace.	14.	Trace.
8.	.03	16.	.32	20.	.25	23.	Trace.
9.	.45	17.	.31	29.	.05	24.	.02
10.	.42	May 4.	Trace.	May 6.	.01	29.	Trace.
14.	1.20	5.	.02	9.	.02	30.	.26
15.	.86	7.	.21	19.	Trace.	31.	.29
16.	1.67	8.	Trace.	24.	Trace.	Apr. 3.	Trace.
17.	.52	9.	.14	31.	.03	4.	.11
18.	.01	23.	Trace.	Juno 4.	Trace.	May 3.	.19
19.	.20	26.	Trace.	13.	.07	4.	.04
20.	.18	June 4.	.01	July 8.	Trace.	15.	.03
21.	.51	July 16.	.23	31.	Trace.	24.	.03
22.	Trace.	Sept. 30.	.01	Aug. 1.	.01	30.	.09
23.	2.58	Oct. 16.	.72	Sept. 5.	.04	Juno 1.	.03
24.	.05	18.	.03	6.	.17	2.	.02
28.	.04	27.	.08	7.	.01	3.	.01
29.	.35	28.	.01	21.	.02	6.	Trace.
Dec. 10.	.29	29.	.04	22.	.05	10.	.02
14.	.05	30.	.60	Nov. 3.	Trace.	13.	.01
15.	.02	Nov. 8.	Trace.	4.	Trace.	14.	.06
16.	Trace.	10.	Trace.	5.	.01	15.	.05
21.	2.78	11.	.05	6.	.01	17.	.03
22.	.34	13.	.02	7.	Trace.	19.	.04
23.	.09	20.	.75	11.	Trace.	July 11.	Trace.
24.	.59	21.	.02	28.	.40	12.	Trace.
25.	.33	Dec. 6.	.15	29.	.15	21.	.01
26.	.48	7.	.47	30.	.42	Aug. 26.	.01
30.	.02	8.	.98	Dec. 1.	.83	Sept. 10.	Trace.
		9.	.13	2.	.11	11.	.04
1886.		11.	Trace.	3.	.07	12.	.01
		22.	Trace.	4.	.08	14.	Trace.
Jan. 12.	.03	23.	.14	7.	.03	15.	.92
13.	.12	28.	Trace.	8.	.10	30.	Trace.
14.	.01	29.	.16	9.	.03	Oct. 6.	.02
15.	.03	30.	.04	10.	.01	9.	.01
17.	.11	1887.		12.	.04	17.	.05
18.	.44			20.	.11	30.	.05
19.	.85			28.	.64	Nov. 3.	Trace.
20.	.96	Jan. 12.	Trace.	29.	.95	15.	1.36
21.	.28	13.	.05	30.	.28	16.	.81
22.	.52	15.	.05			17.	.96
23.	2.35	18.	.02	1888.		18.	.13
24.	.07	19.	.76			19.	.01
25.	.66	20.	.80			20.	.37
26.	.84	21.	.19			21.	.01
27.	.15	24.	Trace.			22.	.24
Feb. 7.	Trace.	27.	.03			23.	.02
23.	.01	Feb. 1.	.18			24.	Trace.
25.	Trace.	2.	.04			25.	Trace.
26.	.02	4.	.22			26.	.01
27.	.03	5.	.29			29.	.01
28.	.18	6.	.01			30.	.07
Mar. 1.	.01	7.	.24			Dec. 1.	.03
2.	.08	8.	Trace.			2.	.02
3.	.15	9.	.12			8.	.03
4.	.02	10.	.28			9.	1.01
5.	.02	11.	.50			10.	.09
6.	.03	12.	.79			11.	.04
7.	.16	13.	.36			12.	Trace.
8.	.17	14.	.55			13.	1.51
9.	.45	15.	Trace.			14.	.13
10.	.06	16.	.33			15.	.74
13.	Trace.	20.	.04			16.	.05
						17.	Trace.

Rainfall record of the Signal Service and Weather Bureau, San Francisco, beginning March 1, 1871.

Date.	Rainfall.	Date.	Rainfall.	Date.	Rainfall.	Date.	Rainfall.
1888.		1889.		1890.		1891.	
	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>
Dec. 20.	Trace.	Oct. 29.	0.05	Mar. 2.	Trace.	Mar. 6.	0.01
21.	.19	23.	.60	3.	Trace.	10.	.06
22.	.35	25.	.71	4.	0.29	11.	Trace.
23.	.10	26.	.72	5.	.04	12.	.02
24.	.07	27.	.14	6.	.31	15.	.06
25.	Trace.	28.	.01	7.	.23	16.	.23
26.	1.09	29.	Trace.	8.	.65	26.	.34
27.	.11	30.	.02	9.	.16	27.	.06
29.	.24	Nov. 17.	.38	10.	.02	28.	.08
1889.		18.	.74	18.	1.31	Apr. 5.	.01
		19.	.58	19.	.72	6.	.74
		20.	.56	22.	.04	7.	.51
Jan. 3.	Trace.	21.	.02	23.	.03	8.	Trace.
4.	.81	22.	.35	25.	.08	9.	Trace.
10.	Trace.	29.	Trace.	26.	.23	10.	.41
11.	.11	30.	.27	28.	Trace.	11.	.01
12.	.11	Dec. 1.	.09	29.	.40	13.	.18
17.	Trace.	2.	.03	30.	.22	14.	.14
18.	.14	3.	.36	Apr. 6.	.55	16.	.34
20.	Trace.	4.	.51	7.	Trace.	17.	.10
21.	.10	5.	1.44	17.	.01	18.	Trace.
23.	.01	6.	1.28	18.	.52	19.	Trace.
Feb. 6.	.01	7.	.53	19.	.02	23.	Trace.
15.	.03	8.	1.44	29.	.05	May 3.	Trace.
16.	.01	9.	.05	30.	.03	6.	.60
18.	.06	10.	.33	May 7.	.45	7.	Trace.
23.	.01	11.	.34	8.	.01	14.	Trace.
24.	.59	12.	.70	10.	.45	27.	.52
25.	.01	17.	.50	11.	.16	28.	.09
Mar. 7.	.39	18.	.69	June 17.	.05	29.	Trace.
8.	.20	19.	1.12	23.	.05	30.	.03
9.	.65	20.	.26	July 8.	.02	31.	.01
10.	.46	21.	.81	Sept. 28.	Trace.	June 11.	.10
11.	.03	22.	1.24	29.	.29	12.	.01
12.	.95	23.	.09	30.	.02	17.	Trace.
13.	2.54	24.	1.42	Dee. 3.	1.83	July 8.	Trace.
14.	.28	25.	.32	4.	.18	9.	.09
15.	.78	26.	.04	5.	.02	10.	Trace.
16.	.23	28.	.08	24.	.26	11.	.01
17.	.01	30.	.14	25.	.17	Aug. 30.	.02
18.	.52			30.	.79	Sept. 5.	Trace.
20.	.68	1890.				9.	.01
23.	.01			1891.		10.	.01
27.	.05	Jan. 1.	.05			13.	.08
28.	Trace.	2.	.85	Jan. 1.	.06	15.	.04
29.	Trace.	3.	.37	2.	.15	22.	.63
Apr. 2.	.08	4.	.36	3.	.26	Oct. 22.	Trace.
3.	.03	5.	.29	4.	.49	28.	.03
4.	.05	6.	.02	5.	Trace.	31.	.01
5.	.04	7.	.01	14.	Trace.	Nov. 1.	.05
8.	.30	10.	.03	15.	.01	5.	.06
9.	.01	12.	.48	17.	.01	18.	.01
10.	.02	13.	.36	Feb. 1.	.42	19.	.25
13.	.21	15.	.23	5.	.07	30.	.19
11.	Trace.	16.	1.04	6.	Trace.	Dec. 1.	.30
15.	.22	17.	.45	10.	.01	3.	.50
16.	Trace.	18.	.69	11.	.01	4.	.25
20.	Trace.	19.	.34	12.	.01	8.	.09
21.	Trace.	20.	.03	14.	.04	9.	.29
27.	Trace.	21.	.55	15.	3.38	16.	.48
May 2.	.04	22.	.36	16.	.54	19.	.50
4.	.15	23.	.16	17.	.04	23.	.06
5.	1.29	24.	.72	18.	.34	26.	Trace.
6.	.43	25.	1.83	19.	.02	27.	.40
7.	.02	29.	.19	20.	Trace.	28.	.03
8.	.08	30.	.20	21.	.46	29.	2.21
12.	.01	Feb. 4.	.03	22.	.69	30.	.40
13.	.05	5.	.04	23.	.22	31.	.11
14.	Trace.	15.	.07	24.	.12		
15.	.10	16.	1.07	25.	.10	1892.	
June 27.	.03	17.	.29	26.	.22		
July 10.	.01	18.	.70	27.	.18	Jan. 1.	.78
Oct. 7.	1.06	19.	1.27	28.	.39	4.	Trace.
8.	.01	20.	.74	Mar. 1.	.68	7.	.37
17.	.70	21.	.62	2.	.10	8.	.09
18.	1.33	22.	.23	3.	.13	25.	.32
20.	1.25	24.	.01	4.	Trace.	26.	.74
21.	.68	25.	.09	5.	.19	27.	.10

Rainfall record of the Signal Service and Weather Bureau, San Francisco, beginning March 1, 1871—Continued.

Date.	Rainfall.	Date.	Rainfall.	Date.	Rainfall.	Date.	Rainfall.
1892.		1893.		1893.		1894.	
	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>
Jan. 30.....	0.01	Feb. 1.....	0.03	Dec. 26.....	0.23	Dec. 4.....	0.56
31.....	.01	2.....	.19	27.....	.06	5.....	.60
Feb. 1.....	.30	3.....	.09			6.....	.23
4.....	.34	4.....	.57	1894.		7.....	.83
6.....	.39	5.....	.28			8.....	.87
17.....	.04	6.....	.04	Jan. 1.....	.23	10.....	.23
18.....	1.03	8.....	.36	2.....	.40	15.....	.10
19.....	.71	9.....	1.06	3.....	.01	16.....	.01
20.....	.05	12.....	.13	7.....		Trace.	.21
21.....	.01	Mar. 4.....	.94	8.....		Trace.	.18.....
24.....	.03	5.....	.10	14.....	.04	19.....	.99
Mar. 1.....	.26	7.....		15.....	1.84	20.....	.14
2.....	.16	8.....	.59	16.....	.08	21.....	1.19
15.....	.45	10.....	.08	17.....	.22	22.....	.16
18.....	.47	11.....	.98	18.....	.15	23.....	Trace.
19.....	.22	12.....	.04	19.....	.02	27.....	.30
20.....	.06	14.....	.01	20.....	2.61	28.....	.39
22.....	.01	15.....	.10	21.....	.16	29.....	.37
23.....	.01	16.....	.05	22.....	.17	30.....	.02
27.....	.29	18.....	.06	29.....	.05	31.....	.37
29.....	.72	19.....	.36	30.....	.01		
30.....	.20	20.....	.52	Feb. 5.....	.50	1895.	
Apr. 1.....	.26	21.....	.15	7.....	.09		
2.....	.02	23.....	.07	8.....	.03	Jan. 3.....	Trace.
14.....	.18	24.....	.02	9.....	.07	4.....	1.96
15.....	.05	29.....		10.....	.14	5.....	.15
17.....	.06	30.....	.01	11.....	.01	6.....	.06
21.....	.38	Apr. 2.....		12.....		Trace.	.82
22.....	Trace.	3.....	Trace.	15.....	.38	8.....	.01
24.....	.08	5.....	.23	16.....	.05	13.....	.45
29.....	.26	6.....	.49	17.....	.10	16.....	1.40
30.....	.10	7.....	.01	18.....	.14	17.....	.61
May 1.....	.19	8.....	.03	19.....	.85	18.....	.44
2.....	.07	9.....		20.....	.33	19.....	.11
4.....	.01	10.....	.10	Mar. 2.....	.34	20.....	Trace.
5.....	.02	11.....	.04	5.....	.08	21.....	.32
6.....	.32	22.....	.13	6.....	.10	22.....	.63
7.....	.02	24.....		7.....	.02	23.....	.03
10.....	.08	27.....		8.....		Feb. 10.....	.06
15.....	1.15	May 1.....	Trace.	9.....	.02	11.....	.96
June 12.....	Trace.	2.....	Trace.	16.....	.04	12.....	.91
13.....	Trace.	3.....	Trace.	18.....		13.....	.10
Sept. 29.....	.02	8.....	Trace.	27.....		21.....	Trace.
Oct. 6.....	.05	15.....	Trace.	29.....		22.....	.19
9.....	.26	16.....	.04	30.....		23.....	.09
16.....	.91	17.....	.11	Apr. 22.....	.01	Mar. 11.....	Trace.
27.....	Trace.	20.....	Trace.	23.....		12.....	Trace.
28.....	.02	June 9.....	Trace.	25.....	.19	13.....	.02
30.....	.33	22.....	.03	26.....	.27	14.....	.01
31.....	.08	July 26.....	.02	27.....	.03	16.....	Trace.
Nov. 23.....	.35	Sept. 6.....	.02	May 14.....	.29	17.....	.10
25.....	.31	8.....	.07			18.....	.05
26.....	.05	10.....		Trace.		20.....	.67
27.....	.88	11.....	.12	21.....	.12	21.....	.04
28.....	.62	Oct. 9.....	.10	25.....	.63	22.....	.20
29.....	.39	15.....	.02	26.....	.05	26.....	Trace.
30.....	1.31	30.....	.04	27.....	.21	27.....	.35
Dec. 1.....	.06	Nov. 5.....	.02	31.....	.01	28.....	.45
2.....	1.22	6.....	.10	June 1.....	Trace.	Apr. 1.....	.01
3.....	1.30	7.....	.01	2.....	.20	10.....	.02
4.....	.18	21.....	.03	3.....	.02	13.....	.09
20.....	.01	22.....	.01	4.....	.17	24.....	Trace.
22.....	.04	23.....	.06	16.....	.15	25.....	Trace.
23.....	.26	24.....	1.26	17.....	.02	26.....	.37
24.....	1.14	25.....	.03	July 10.....	Trace.	27.....	.54
25.....	.57	26.....	1.69	Sept. 29.....	.68	28.....	.21
26.....	.30	27.....	.37	30.....	.37	May 1.....	.26
27.....	Trace.	28.....	.09	Oct. 17.....	Trace.	2.....	.01
1893.		29.....	.30	18.....	.58	3.....	Trace.
Jan. 14.....	Trace.	30.....	.21	19.....	.02	4.....	.04
15.....	.27	Dec. 1.....	Trace.	20.....	.45	5.....	Trace.
16.....	.05	13.....		21.....	.04	6.....	Trace.
26.....	.66	14.....	.50	23.....	.64	25.....	Trace.
27.....	.64	21.....	.97	Nov. 26.....	Trace.	26.....	.14
28.....	.04	22.....	.04	27.....	.88	27.....	.07
30.....	1.39	23.....	.01	Dec. 1.....	.03	28.....	.08
		24.....	.43	2.....	.18	July 1.....	Trace.
		25.....	.01	3.....	.02	4.....	Trace.

Rainfall record of the Signal Service and Weather Bureau, San Francisco, beginning
March 1, 1871—Continued.

Date.	Rainfall.	Date.	Rainfall.	Date.	Rainfall.	Date.	Rainfall.
1895.		1896.		1897.		1897.	
	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>
July 5.	.01	Apr. 14.	.09	Jan. 25.	.14	Oct. 23.	1.41
Sept. 3.	Trace.	15.	.01	27.	.09	Nov. 3.	Trace.
9.	Trace.	16.	.01	28.	.77	4.	.23
10.	.09	19.	Trace.	29.	.04	5.	.01
11.	.09	21.	.22	30.	.04	6.	.03
12.	.56	22.	.02	31.	1.08	13.	Trace.
13.	.03	23.	.69	Feb. 1.	1.23	14.	.01
Oct. 15.	.06	24.	1.90	2.	.04	20.	.11
16.	.01	25.	.10	3.	.42	23.	.42
19.	Trace.	26.	.13	4.	.66	24.	.22
20.	.01	29.	.09	5.	.61	25.	.02
21.	.03	May 1.	Trace.	6.	.01	Dec. 6.	Trace.
Nov. 3.	.19	3.	Trace.	7.	.36	7.	.75
4.	.04	4.	.04	11.	.02	8.	.27
5.	1.04	5.	Trace.	12.	.03	9.	.01
6.	.02	7.	Trace.	13.	.17	10.	Trace.
10.	Trace.	11.	.27	14.	.02	11.	.07
12.	Trace.	20.	Trace.	15.	Trace.	14.	.12
27.	.26	21.	.33	16.	.06	24.	Trace.
28.	.12	22.	.03	17.	.01		
29.	.11	29.	.05	18.	.27	1898.	
30.	Trace.	30.	Trace.	19.	.39		
Dec. 1.	Trace.	July 10.	.04	20.	.09	Jan. 6.	.32
5.	.09	24.	Trace.	28.	.01	7.	.03
6.	.11	25.	Trace.	1.	.38	8.	Trace.
15.	.13	Aug. 18.	.01	2.	.88	11.	.31
16.	.02	19.	.02	3.	.36	12.	.02
17.	.13	28.	Trace.	4.	Trace.	15.	.25
18.	.01	30.	.06	5.	.27	16.	Trace.
19.	.33	Sept. 15.	.02	6.	.74	17.	.09
20.	.27	18.	.01	7.	.15	19.	.03
21.	.34	19.	.08	8.	.12	22.	Trace.
23.	Trace.	22.	.40	9.	.01	24.	Trace.
24.	Trace.	23.	.01	16.	Trace.	25.	.07
1896.		Oct. 10.	Trace.	17.	.04	31.	Trace.
		11.	.01	18.	.08	Feb. 1.	.20
		24.	Trace.	19.	.03	3.	.02
Jan. 13.	.56	25.	Trace.	20.	.03	5.	.08
14.	.17	26.	.54	25.	Trace.	6.	.17
15.	.28	27.	.94	27.	.10	7.	.19
16.	.46	29.	.04	28.	1.33	8.	Trace.
17.	.98	31.	.02	29.	Trace.	12.	.01
18.	1.18	Nov. 8.	Trace.	31.	.04	20.	Trace.
19.	.04	9.	.31	Apr. 1.	.20	21.	.44
20.	.01	10.	Trace.	4.	Trace.	24.	.78
21.	.21	11.	Trace.	6.	.03	25.	.02
23.	.52	16.	.01	18.	Trace.	26.	.01
25.	.68	17.	.24	19.	.04	27.	.21
26.	.55	19.	.14	May 6.	Trace.	Mar. 7.	.05
27.	1.35	20.	.44	13.	Trace.	8.	.08
28.	.15	21.	Trace.	14.	Trace.	14.	Trace.
Feb. 1.	.18	22.	.31	15.	Trace.	15.	.04
21.	.01	23.	2.00	16.	.02	16.	.03
26.	Trace.	24.	1.11	17.	.59	17.	Trace.
27.	.01	Dec. 12.	Trace.	June 14.	.03	25.	.04
28.	.05	13.	.28	19.	.03	Apr. 2.	Trace.
29.	.03	14.	.02	20.	.16	6.	.19
Mar. 2.	.55	15.	.07	21.	Trace.	May 1.	Trace.
3.	.45	16.	1.65	22.	Trace.	4.	Trace.
4.	.07	17.	Trace.	24.	Trace.	5.	Trace.
5.	.25	18.	.02	25.	Trace.	12.	Trace.
6.	.05	19.	Trace.	26.	Trace.	13.	.03
14.	Trace.	23.	.02	July 22.	Trace.	14.	.35
15.	.32	24.	Trace.	Aug. 3.	Trace.	15.	.89
16.	.74	26.	.53	9.	Trace.	16.	.04
19.	Trace.	27.	.79	15.	Trace.	21.	.01
20.	.03	28.	.11	Sept. 3.	.02	22.	.06
21.	.02	29.	Trace.	25.	Trace.	26.	Trace.
22.	.10	30.	.56	26.	Trace.	27.	.03
23.	.01	31.	.29	28.	Trace.	28.	.03
26.	.16			30.	.08	31.	Trace.
27.	.10	1897.		Oct. 1.	Trace.	June 1.	.18
Apr. 5.	.91			5.	Trace.	8.	Trace.
6.	.53	Jan. 13.	.01	6.	Trace.	9.	.01
9.	.24	14.	Trace.	12.	Trace.	10.	Trace.
10.	.06	16.	.03	13.	.01	11.	Trace.
12.	Trace.	20.	Trace.	21.	.27	Aug. 2.	Trace.
13.	.02	24.	.06	22.	.01	3.	Trace.

Rainfall record of the Signal Service and Weather Bureau, San Francisco, beginning March 1, 1871—Conclnded.

Date.	Rainfall.	Date.	Rainfall.	Date.	Rainfall.	Date.	Rainfall.
1898.		1898.		1899.		1899.	
	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>
Sept. 22.....	.09	Dec. 20.....	.32	Feb. 2.....	Trace.	Apr. 2.....	Trace.
24.....	Trace.	29.....	.01	3.....	.02	18.....	Trace.
25.....	.73			28.....	Trace.	23.....	.03
26.....	.24	1899.		Mar. 1.....	.22	24.....	.45
Oct. 2.....	.24			2.....	.01	25.....	.05
6.....	Trace.	Jan. 1.....	.47	8.....	.02	27.....	.03
7.....	.45	2.....	.22	9.....	Trace.	30.....	.06
9.....	Trace.	3.....	.03	11.....	.01	May 22.....	Trace.
22.....	Trace.	6.....	.03	14.....	.21	24.....	.10
23.....	.12	7.....	.93	15.....	.95	29.....	Trace.
30.....	Trace.	9.....	.22	16.....	.93	31.....	.76
31.....	.05	10.....	.78	19.....	.38	June 1.....	.01
Nov. 19.....	.24	11.....	.27	20.....	.23	19.....	Trace.
20.....	.12	12.....	Trace.	21.....	.11	24.....	Trace.
22.....	.04	13.....	.22	22.....	2.15	26.....	Trace.
28.....	Trace.	14.....	.21	23.....	1.48	Aug. 7.....	Trace.
29.....	.06	15.....	.29	24.....	.87	11.....	Trace.
Dec. 13.....	Trace.	16.....	Trace.	25.....	.01		
14.....	.59	17.....	Trace.	28.....	Trace.		
19.....	.70	Feb. 1.....	.08	29.....	.03		

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